THE CULTIVATOR.

THIRD — To Improve the Soil and the Mind. — SERIES

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Wheat in Western and Central New-York.

Wheat, as a general farm crop, has for some time and to a large extent, ceased to receive that attention formerly bestowed upon its culture in Western and Central New-York. It now, however, seems to be reviving again—it is the general remark that more winter wheat was sown last fall than for several years before—the comparative exemption from the midge of much of last season's crop, having prompted to another trial many who were almost hopeless of further successful wheat culture. In view of these facts, we now take occasion to present some thoughts on the subject—opinions for some time held, and in part before expressed—but still, we hope, worthy of notice by our present parish of readers.

The abandonment of wheat culture, has been in many instances greatly to the profit of the farmer. Like barley growing at the present time, wheat growing had been *run too hard*—had been pursued upon poor soils or those worn by long culture of this grain—had been attempted by methods of husbandry unsuited to its wants, and but partially developing its productive capacity, and could well be laid aside for other branches of agricultural production. Cropping with wheat, regardless of the exact character and fertility of the soil, regardless of the changes of climate and season which seem to have taken place, and above all, regardless of the character and habits of the new and potent insect enemy it must now contend with, has resulted in a loss of millions to the farmer. It was well for him to pause in his course—pause until he considered these influences—that he may again profitably give a share of his attention to this late great staple of our country.

What are the requisites of wheat growing, and what the causes of its general failure among us? A brief consideration of these questions will show us, that under certain circumstances its culture is still remunerative, and that under other certain circumstances we but throw away the labor and expense incurred in attempting its production.

1. To grow wheat, we need a fertile, well-drained soil—either a porous, heavy loam, or a clayey soil made porous by artificial drainage. A soil containing lime, and above all so rich as to be capable of sustaining a large and heavy growth, is *now* a necessity of the wheat crop. It must be a porous soil, that the plants may not winter-kill, and that their maturity be not retarded by a late, wet season. A rich soil, if liable to suffer from the long continued rains of spring, will be a cold soil as well, and produce an unhealthy vegetable growth, maturing slowly as well as unevenly, and hence extremely liable to the various casualties which affect the wheat crop. What is called a *warm, quick* soil, is most certain to secure a thrifty, perfect growth, and an abundant product.

2. Another demand of the wheat crop, is sowing so early that the plants may get a fair autumn growth, be prepared for the rigor of winter, and for tillering so as to fill the ground in the spring. Early sowing also tends to hasten the ripening of the crop, at least to some extent. The work must be timed right—too early may be as injurious as too late. Attention should also be given to the selection of the most productive and vigorous varieties—and early maturity is a quality particularly essential.

3. That the land be well tilled, is also a requisite of success in wheat growing. It should be *in the best order* possible; if manured before sowing, the fertilizer applied should be intimately mixed with the soil, and not far below the surface. Let the land be in fine tilth, and then drill in the seed, and an additional security is had against winter-killing, and other injuries consequent thereon. Rolling is an excellent practice, if the soil is mellow and likely to remain too light for wheat, as is occassionally the case.

In the *wheat midge* we have the alleged cause of the failure of the wheat crop, and its ravages have been truly disheartening. But many serious failures occurred before this injury became general—failures from poverity of soil, caused by sowing wheat after wheat or other exhausting crops—from want of drainage, and consequent winter-killing, or rust—from late sowing on imperfectly prepared ground, also inducing blight and

rust, and from poor management generally. All these causes prepare the wheat plant for the attacks of the midge, and it will generally be found that the poorer and later the crop, the less there is left by the fly to reward the labor of the farmer; while the *best wheat*—the earliest, healthiest, and heaviest growth,—still yields a remunerating product.

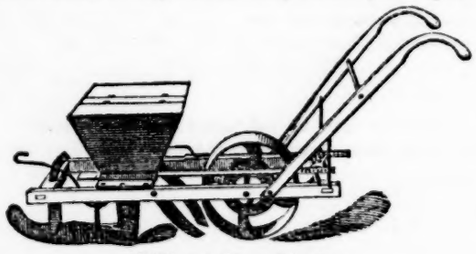
The average injury by the midge, in many instances known to us, has been from five to seven bushels per acre—the lighter and later the wheat, the greater the comparative loss. A light yield—say ten bushels per acre—will be one-half or more destroyed; a good crop of twenty-five or thirty bushels per acre, will seem comparatively uninjured, though one-fifth has gone to feed the insect. Hence the importance of securing a good growth, for a light one fails to repay the labor of its production. Hence we advise the sowing of such soils *only* as are in fertility and character suited to the crop, and of sowing these early to vigorous and early maturing varieties. Let farmers select such soils and situations, and sow wheat again, but not an acre more than they can sow in the best order, as above advised, and we think they will not only be able to supply home consumption, but have a surplus for their neighbors. High farming will probably be found as effective in decreasing the ravages of insects in this as in the old country, where doubling the average product of the wheat crop, has been declared to render the devastation of insects of but small account to the farmer.

Corn and Turnip Drills.

MESSRS. EDS.—I like the idea of the editors of agricultural papers testing the different farm implements that are offered to the public, and giving their readers reliable information about them. This alone would be worth more than the price of your paper. I would especially like to know what is the best drill for sowing ruta baga seed, and for planting corn. Also the best root-slicer or cutter, with price, and by whom for sale.

J. M. Y.

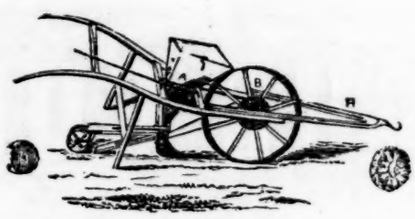
The best corn-planter we have tried is BILLINGS'. It is drawn by one horse and drops in small hills about ten inches apart, or more remote as may be desired, and the rows three feet, more or less, asunder, as required.



Billings' Corn Planter.

It works well on inverted sod, and pulverizes or scrapes the mellow earth over the seed in a more perfect manner than can be done by hand. Hence we have found the corn to come up more evenly after the machine than when planted by the hoe. Doubtless a turnip-dropper might be attached to it. The price we think is $16. Emery's planter and drill is also said to be an excellent one—price $14. Willard's patent root-slicer, which we noticed a few weeks since, we have found to be an excellent one—price $10.

Small patches of ruta bagas may be sowed in the following manner, without the expense of purchasing a



Emery's Seed Planter.

drill. Mark drills or furrows by a "marker" something like a corn-marker, that is resembling a very coarse rake, the teeth being two inches in diameter and twice as long, and 2 to 2½ feet apart. This by drawing over the level and harrowed surface, will make several furrows at a time. Next nail a pint tin-cup to the lower end of a wood rod about the size of a walking cane, the rod serving as a handle for shaking the cup near the ground without stooping. Then make a hole in the bottom of the cup a little larger than a turnip seed. Place the seed in the cup, hold it by the long handle just over the drill, and walk along rapidly, shaking it all the while. It will drop the seed evenly along the drills, after which the whole is covered with a light harrow or brush running lengthwise with them. The hole in the cup may be enlarged or another made if a more rapid discharge of seed is desired.

Breeds of Swine.

What breed of hogs do you consider best for the farmer to raise? those that will make the most pork for the same amount of feed? and mature in the shortest time? and what weight will they make when full grown? Berkshires, Suffolks, Spanish, and Essex, are all advertised, but a novice has nothing from which to judge of the best kind. Would an article showing the relative merits of each be out of place? If you publish anything on them, please say whether any of them are spotted, or any other color than white. L. F. D. *Brown Co., O.*

We have not sufficient and accurate information as to which breed would be most profitable; for, as with cattle, although we have long controversies on the merits of different breeds, yet none seem disposed to settle the question by instituting carefully conducted and full experiments. Our own opinion is, that if our correspondent will procure either Berkshire, Essex, or Improved Suffolk, he will have excellent swine, and we do not think there is much difference in their value. Suffolks are usually white; Berkshires mostly spotted or black; and Essex variously between them. We are not prepared to say to what size they will attain; much will depend on their management. A young animal, fed with as much *undiluted* sour milk as he wants, through his first season, will probably more than double one scantily fed on grass. They have occasionally been made to weigh 400 to 600 lbs.

MANURE AND POTATOES.—Many have long since observed that high manuring promotes the rot of the potato. By uniformly planting on rather dry, unmanured land, we have scarcely ever been troubled with the rot, taking care at the same time that the tubers are dry when housed. A correspondent of the New-England Farmer furnishes a striking experiment—an acre of sod was plowed and planted with potatoes, which yielded about a hundred bushels, all healthy, except where a large heap of manure had lain all winter, and was drawn away in the spring. The crop here was much heavier, but nearly all rotted.

Transactions of the N. Y. State Ag. Society for 1857.

This is a handsome volume of 800 pages, abounding with valuable practical matter. The benefit conferred by the Society in the publication and dissemination of this matter, is scarcely secondary to that resulting from the exhibition to the tens of thousands of practical farmers at its great fairs, of the most improved products of human ingenuity and agricultural industry. There are several papers of especial interest. One of the most so, is Dr. FITCH'S continuation of his work on destructive insects, which, in the present instance, consists of sixty pages on those which infest evergreen trees. If the Society were unable to do anything else, it should keep Dr. Fitch in the field for a life-time, for nothing can well be more important than a thorough knowledge to the farmer and other cultivators, of noxious insects, and nothing is adding more to the reputation of the Society, both in this country and in Europe, than his labors. The appended paper, now republished, originally prepared by THOMAS SAY, on that portion of Hemipterous insects, which include the squash bug and the bed-bug tribe, although exceedingly valuable as an entomological contribution, possesses little interest to the farmer, for Say was only a nomenclator, and in his work on Entomology scarcely alludes to the habits of insects.

The Report of the farming operations of ROBERT J. SWAN of Geneva, furnishes a good specimen of improved and successful farming, where capital is at command. The proprietor was educated a merchant, but to restore lost health, chose farming, and after two seasons practice under two of the best farmers in the State, bought a 350 acre farm. The soil was wet and tenacious, and the crops usually small. It was badly fenced, abounded with swales and sunken places, where coarse grasses and weeds had full possession. In three years he had drained 200 acres. The remaining portions were afterwards drained, over 300 acres in all,—at an expense of about $6,000, being over 60 miles of tile drain at nearly $100 a mile. There are ten miles of post and board fence, costing $3000. Some of the results of the draining are the following: In 1852, he had 200 bushels of wheat on 40 acres of undrained land, or 5 bushels per acre, the wheat midge causing no damage. In 1857, the drained land gave 20 bushels per acre, and the committee who saw it cut, thought that, but for the damage of this insect, it would have yielded 35 to 40 bushels per acre. The meadow lands on the drained portions, average for the whole, two and a half tons per acre, and the hay is much more nutritious for stock than before. Burrall's mower is used, and cuts with one team about ten acres a day. The nett profits of the farm in 1857, were over three thousand dollars, not estimating straw from 80 acres, and 45 loads of cornstalks, believed to be worth $6 or $700 for fodder and manure. The main points of management in tillage, are "thorough draining, ample manuring, and deep plowing."

The report of the Dairy farm of ZADOC PRATT of Greene county, is another example of successful farming, on land possessing much less natural fertility. Fifty cows yielded in one year 6,500 lbs. of butter, so good as to bring 22 to 27 cents per lb., or over $1500.

The experiments of J. HARRIS of Rochester, on manures, develope, or rather corroborate some curious results, and are worthy the perusal of all who claim to tell by reasoning *a priori*, what will be the effect of specific manures.

The papers of Prof. BREWER, of Prof. WILSON, and others, on European Husbandry, &c., contain a great deal of interesting matter and valuable suggestions. The usual amount of various practical instructions, made up largely from the county reports, constitutes a very acceptable portion of the volume; and the severe and repeated censures on *racing at fairs*, shows that this reprehensible practice is bringing its legitimate fruits.

Feeding off Pastures.

MESSRS. EDITORS—The proprietors of a pasture, containing some 8,000 acres, located in this place, desire to know the general opinion, if any, among the intelligent stock-growers of the United States, relative to the number of sheep which should be equal to a full-grown cow in feeding on pasture—the average live weight of sheep being 50 lbs.—a cow 500 lbs. How many of the former would be proper to turn into a pasture to one of the latter? W. CHAMBERLAIN. *Waialua, Sandwich Islands, Nov.* 9th, 1858.

Farmers disagree as to the relative number of cattle and sheep that may feed in a given pasture—doubtless for the reason that both vary considerably in size, as well as in their requirements of food for a given amount of flesh. As a general rule, however, the same aggregate weight of different animals require the same amount of food. A cow at 500 lbs. will eat about as much as ten sheep at 50 lbs. Some animals of the same species (men not excepted) eat much greater quantities of food than others, without reference to the weight, but still there is a general average. Pasture eaten closely, will not afford so much food per acre as pastures allowed a freer growth, and thus to have the rule more thoroughly correct, it will be best to reduce somewhat the number of sheep.

Sowing Grass Seed.

MESSRS. EDITORS—My experience in farming is very limited. Please assist me. I have a field of 15 acres, which I cultivated with corn in 1857. The yield was 70 bushels per acre. Another field of 20 acres, cultivated with corn in 1858, which produced near 80 bushels per acre. I intend planting the 15 acre field with corn, and the 20 acre field with oats the next spring. I wish to set one of these fields to clover, and the other to timothy. I expect to sow the clover or timothy at the last working of corn, about the last week in June. I am at a loss to know if it will be best to sow the clover or timothy at the planting or soon after the harvesting of the oats. I am afraid the growth of oats may smother out the young grass, if planted in the spring. Now which of the grasses shall I plant with the oats, and when?

I have succeeded well with red-top with corn the two past seasons, and expect to sow some 40 acres at the last working of my corn the next summer. My lands are the French Broad River bottom—beautiful light sandy loam, easy of cultivation, and very fertile. F. W. JOHNSTONE. *Dunn's Rock, N. C.*

Our own experience indicates that unless the weather should continue moist, success will not attend the sowing of clover seed among corn in summer. Either clover or timothy may be sown as soon as the oats are harrowed or drilled in, and covered with a roller or brush—they will not, however, grow much till the oats are removed. And unless the ground should be quite dry when the oats are harvested, the timothy would make as much growth another year if sown early in autumn after them. The clover may be sown early in spring after the corn, and will give a good or fair crop the same

season. We have found generally that a grass crop succeeds quite as well sown alone after a grain crop as with it, the only advantage of the latter practice consisting in the saving of labor in preparing the ground. Different soils and localities, however, give different results, and experiment will be the best guide.

Open and Covered Drains.

MESSRS. EDITORS --I wish to ditch a swamp that has three large springs feeding it by a brook; the springs are forty rods removed. How shall I make the main ditch—open or blind? If blind, how is the best way to let the brook into it, to be safe against drift? Some one's experience can tell. S. J. S.

It is nearly impossible to make an open ditch deep enough. The main drain must be deeper than the side drains, and the latter are generally made too shallow. We have no doubt that many of the recently reported experiments on the great success from draining wet places and quicksands, will in a few years result in entire failure from this cause alone. If turbid water finds its way into the tile, it must ultimately fill them with sediment. Hence sufficient depth must be reached to occasion a thorough filtering.

An open drain must have each of its sides sloped as one and a half, to one in rise, or they will cave in. One only four feet deep would then have to be at least twelve feet wide, besides the breadth of the bottom. The channel for a brook to pass through a covered drain should of course be sufficiently capacious, and in entering, it should pass through a broad bed consisting of many loads of small stone and coarse gravel. If the brook runs rapidly and turbidly into the ditch, and then more slowly through it, it will be sure to deposit sediment and finally choke up. But if the water runs as rapidly, or a little more so, through its whole length than before, it will carry through all the sediment, and and no detriment will follow.

Underdraining.

MESSRS. EDITORS—I have read with great interest, your articles on draining. We are engaged in digging some blind drains, on a tract of land that is low and nearly too level to get a good outlet. I wish to inquire if you have ever experimented in filling blind drains by throwing in small stones promiscuously from the commencement, without leaving a channel in the bottom? If so, what is your opinion of their merit, durability, &c.? With us the expense of tile would be too great, and suitable flat stones are very scarce. What would be your advice in this matter? A. S. HOPPING. *Hanover Neck, N. J.*

Imperfect ditching is scarcely better than none at all. A drain must be deep enough, and have capacity to carry off the water freely. If not deep enough, it is liable to become choked in the course of years by the gradual infiltration of sediment. The depth should in no case be less than three feet, especially for light soils. If the channel is too small, the water escapes too slow to be of great benefit.

As a general rule, a tile-bore only two inches in diameter, and with a descent of but one foot in a hundred, should not drain over half an acre of land rendered wet chiefly by falling rains, (counting the breadth of a rod on each side the drain,) and with a descent of one foot in eighteen, twice the amount of water will be discharged, and consequently this will do for an acre. In other words, the former should not be more than forty rods long, before entering a large bore, nor the latter more than eighty rods. If three inches in diameter, the length may be nearly tripled, for corresponding descents. The upper half of a long drain may have small bore, and enlarging as it descends. The preceding results are derived from careful calculation founded on experiment.

All other modes of filling ditches should admit of an equivalent flow of water. If the channel is made of stone, it should be considerably larger, as the irregular sides impede the current. But if filled with small stones promiscuously, the current will be retarded many fold, and this mode should never be adopted unless for very short drains (or which is the same thing, with but little water to draw off,) and with pretty steep descent. We have often seen this mode of filling adopted; and the same water that would pass freely through a two-inch tile, would fill such a drain up nearly a foot, unless the stones were very large, in which case the earth would soon fall in at top and sides among them.

Where the soil is a strong adhesive clay, stones for channels may be used with some safety; but where it is of a lighter or more friable character, it is difficult to prevent the washing and settling of the earth among the stones, and tile forms the only secure channel; unless durable wood can be had, sawed into narrow boards; or brush, for very short drains of steep descent.

The Advisory Board and Pat. Office.

[*Correspondence of The Cultivator.*]

"I am sorry to see so much in the agricultural and other papers, ridiculing the "Advisory Board of Agriculture," and abusing the Secretary of the Interior and Commissioner HOLT. They are men of high character, and what they did in getting up this meeting, was with the very best intentions, and will result in much good. Agricultural Statistics—correct ones, are of vast importance to the governments and people of England and France, and equally so *here* A certain sum was appropriated by Congress for agricultural purposes, and placed in the hands of the Secretary of the Interior and Commissioner of Patents, to be expended for purposes connected with the interests of agriculture, some portions of which are expended in the purchase of seeds for distribution *all over* the country. It is not expected that every seed is going to return an hundred fold, but I am satisfied that great benefit is and will accrue to the country, in the introduction of many of the seeds spread broadcast among the farmers and others. About $3,000 of the sum is, in conjunction with an equal sum from the Smithsonian Institution, expended in procuring meteorological observations—amount of rain falling in a given time or place, &c., all of which will result in incalculable good. If the Secretary and Commissioner of Patents thought best, and of course they did, to invite delegates to meet at Washington, they did not exceed the limits of their duty, or squander government money for political or other mercenary or selfish purposes. Mr. HOLT is one of the best and soundest lawyers of the country, a gentleman of worth and wealth, and who succeded MI. Commissioner MASON, only by the most urgent solicitations of the President. Mr. THOMPSON is a Mississippi planter, a man of great wealth, a practical man too, in the science and practice of agriculture. 'Tis said this is a free country, and every body has a right to express his opinion upon all matters, whether they understand them or not. One of the objects I believe they had in view, was to invite farmers and others to meet at Washington, partly at least, to let folks know *farmers were somebody*· but the course that many of the papers have taken, is to render the profession of the farmer contemptible and disreputable, and encouraging our young men to engage in any other pursuit than that of farming. You have doubtless read the published list of delegates attending the convention —most of them are men deeply engaged in the improvement of agriculture, and they are men of sense, strong-minded men, capable of acting well their part in almost any and every department of government."

Surface Flowage from Wood Lots.

Few farms in this land of "reserved wood-lots," are so favorably situated that they have no fields injured by water leaching down upon them from adjoining woodland. The water of melting snow in spring, and of showers in summer, keeps up so abundant a supply, that vegetation is checked or wholly destroyed, especially upon clayey hill-sides or other impervious subsoils. Hence it is desirable to check or turn aside such overflow, and thus escape the injurious effects upon crops.

This is best done by drains, open or covered, of greater or less depth, according to the amount of water and depth of soil affected by the flowage. Where no drains are constructed, care should be taken to plow deep, well-turned furrows, leading off all surface water into one general issue, rather than allow it to damage the whole crop. A few hours labor in cutting off the on-flow of water from such sources, will frequently pay as large a profit as the tillage of acres without such precaution. We desire merely to notice this matter, as to those interested it will at once commend itself as worthy of their attention.

Swine—The Suffolks.

Messrs. Tucker & Son—As you have requested correspondents to give their views on the subject of rearing and fattening of swine, proper age, &c., I will give my experience in that branch of farming. For the past few years I have been breeding Suffolks, and as the common complaint of their opposers, (or those that are opposed to introducing any improvements in swine,) is, that they are too small, and that they have no hair, and would freeze in the cold winters—it has been one object with me to do away with both these objections—by selecting for breeders only those that promise to obtain a larger size than the ordinary pig, and also with those that have the most hair, not however, so much for the purpose of keeping them warm in winter, as to protect them from the summer's sun. I have never had any difficulty in keeping them warm in winter, as a fat animal does not suffer from the cold as a lean one does, and all that are acquainted with them, will admit that they are easily kept in good condition. I think I have succeeded in rearing a large pig without losing his propensity to fatten, easily attaining 400 pounds at 15 to 18 months old, net. The one year old boar that took the first premium at the State Fair last fall, was bred by me. Also my experience teaches me that a Suffolk pig will attain a larger size by not being fed too high the first three months of his life; also that there is great danger of killing them if too highly fed before that age, and if they live they fail to be useful as breeders, from too much fat having accumulated on them, rendering them useless for that purpose. I have killed many a fine pig by feeding the sow too much the first six weeks of their lives, the pigs getting so fat that they choked up at two or three weeks old, and droop and die in a few days after. The first case that occurred with me was with a litter of twelve pigs, and I thought I would see what I could do with them; at two weeks old the difficulty began; they were pronounced the best pigs by some that saw them then, they had ever seen, but in a few days they were nearly half dead, and by reducing the keep of the sow I saved part of them. Have known whole litters of them lost in the same way; but with a scant diet for the first four weeks, have always succeeded in rearing from eight to ten to the litter, and two litters a year from a breeding sow. My experience with the Suffolk is, that with proper keeping both boar and sow, they are very prolific, but with too high keeping the litters are scant in number, and few live at that.

I think that farmers lose sight of the fact that an animal of good form, and light in the offal, whether neat cattle, horses, sheep, or swine, (and well kept in good condition,) are much better to withstand the cold than animals of contrary make; that is, with flabby sides, big legs, and coarse, large heads and horns, if of the neat cattle tribe. That animals of good form will keep in much better condition with the same keeping, I believe is universally admitted by all those that have given the subject attention.

If the above paragraph is correct, it is easy to see that the Suffolk pig will not be badly affected by the cold weather, as his offal is very light; and I think all must admit that it is correct, without regard to the different breeds, as all breeds have some poorer animals than others of the same breed.

We are a progressive people, Messrs. Editors, and I think the best cattle and pigs have not yet been bred. It therefore becomes us farmers to be on the alert, and see what we can do by way of improvement in all kinds of farm stock. I am very sorry to see so much apathy on the subject by many of our farmers, and I would like to see the native pig that *H.* tells of in your issue of the 20th Jan., that will compare with the poorest Suffolk I have on hand at the present time. I have never seen one, and I have been engaged in farming for more than one-quarter of a century. The subject is not exhausted, but this is of sufficient length for one paper. Perhaps I may resume it in a future number. Jonathan Talcott. *Rome, N. Y.*

Permanent Labels.

Eds. Co Gent.—Is not the following receipe for labels, the one referred to by you in your paper recently? If it is not, I propose it as a substitute for yours. I met with it some years ago, and have found it on trial just the thing for Permanent Labels:

Take of Verdigris and Sal Ammoniac each two drachms; Lampblack one drachm; water four ounces. Mix well in a mortar, adding the water gradually. Keep in a glass vial securely stopped. Write with the ink in a quill pen, upon clean, bright zinc plates of any desired form. When dry, it may be exposed to the weather, or buried in the ground for years, without obliterating the writing. Shake the ink well before using. C. G. Judd.

Steamed Brown Bread.

Recipe for making brown bread, which we think is a little extra, having used it in our family several years.

Take two quarts of sweet skim-milk, one tablespoonful of saleratus, one of salt, half a cup of molasses; put in equal quantities of rye and Indian meal, until the dough is as stiff as can be conveniently stirred with a spoon; then put it in two two-quart tins. Place sticks across the bottom of the kettle to keep the water from the bread; place one of the tins on these, and the other in a tin steamer placed on the top of the same kettle, and let it steam three hours. Care should be taken to keep the water boiling while the bread is cooking. When done, put it in a warm oven long enough to *dry* the top of it not *bake* it. Yeast can be used instead of saleratus, if any prefer it, but the bread must rise well before putting it in the kettle. Mellie.

Grapes from Eyes.

The *Gardener's Monthly* says the great secret of propagating grapes from eyes successfully, is not to keep them too warm at first after being cut for propagating, and recommends their being placed in a heap in a damp cool place in the propagating house, for a week, before placing them in the boxes. After potting keep them rather cool at first, and gradually increase the heat.

Change of Food for Stock.

The importance at all seasons, and especially in winter, of frequent changes in the food of stock, generally receives too little consideration by the farmer. As we gain more experience in wintering animals, we become more and more convinced that their health and strength are largely promoted by careful attention to this particular. Change of pasture in summer we have found beneficial in many ways, and a change of fodder in winter from one kind to another, seems to promote thrift by increasing the appetite, thus inducing a greater consumption of food and the better satisfaction of the animal.

On this point of *satisfaction*, Flint's "*Dairy Farming*" tells of a German agriculturist, who, after experimenting for several years on the feeding of cows, says he found "that to receive the full benefit of its food, the animal must be *wholly satisfied*"—fully fed until it desires nothing more. Nutrition to keep the animal growth and functions unimpaired, and bulk to fill the stomach, are requisite—these supplied, the animal ruminates at ease until the time arrives for its next supply. In our own case, of the forage provided, it is our object to induce our stock to consume all they will without waste—to fill themselves so that they are satisfied and at ease for the interval between each regular feeding. To this end, and within our limited reach, we find nothing better than frequent changes in the kind and quality of food—not following a regular rotation, but guided by the weather, and the changing tastes and appetites of our animals.

We have cornstalks, clover hay, timothy hay, and a mixture of the two—also red-top hay and a strawstack. Bean straw is also included in our supply. A few roots were grown, and we have the usual coarse grains of the farm, as well as faith in the economy of feeding them, if occasion requires; but as yet, our fodder has sufficed to keep up the condition of our cattle and sheep, and the latter have considerably improved since brought to the yard. We had a quantity of pumpkins, but they are now all consumed. An occasional feed of roots or a slop of bran or mixed meal, will take their place, particularly with the milch cows.

Twice a day is a sufficient number of times for giving out cornstalks to cattle. Hay of different kinds is given once or twice; occasionally it is brined—in that case we use some cut two years ago, and of an inferior quality. If they do not fully consume any feed given out, we change it for less of something more palatable—keeping in view economical consumption of fodder as well as thrift of stock. Sometimes they seem less hungry than at others—then it is needful to give less—and it will give profitable exercise to the judgment of any attentive, observing farmer, to take the personal oversight of these things.

Sheep are benefited by change of food as much or more than cattle. Clover hay is one of the best liked feeds we can supply, but they eat this, even, with a better relish after a meal of bean straw, of red-top hay, or a run with cows on cornstalks. For wheat and oat straw and chaff, as a change, they seem to have an especial liking, and we believe it will be found profitable to provide all the above, and good places to feed them out, both for the thrift of your flocks and the true economy of bringing them through the winter. So our experience teaches us.

Many points connected with the above, might have been remarked upon, but we like always to "stick to our text," and that regards, mainly, changing the feed of stock.

Share's Hoeing and Hilling Machine.

As it is a matter of considerable importance that farmers communicate the results of their experience through the columns of Agricultural papers, I would say that no implement of husbandry that has come to my knowledge, is better adapted to answer the purpose for which it is designed, than *Share's Hoeing and Hilling Machine*. It saves the labor of three hands at least, and performs the work in a more neat and uniform manner than is usually done by the hand hoe. We run the machine between the rows, once each way, within about four inches of the hills, leaving a space of about eight inches square to be cultivated if grassy, by the hand hoe, and in hilling, spread the wings so as to shave the soil in a very handsome manner around each hill to any required depth. It is much less liable to injure a hill of corn or potatoes, or any hoed crop, by covering or throwing stones on them, than the plow, as from the peculiar construction of the wings, stones are inclined to roll back into the furrow, when the plow is liable to throw them over and cover up or break down the hill.

How it will succeed in eradicating the Canada thistle, I do not know, but it is *death* on quack, white clover, daisies and sorrel, cutting up the small fibres in such a manner as to leave nothing from which vegetation can again start. In short, I conceive the plan of the machine to be "just the thing." I have much more to say with regard to the introduction of improved implements of husbandry in this region, but must defer any further remarks until another time. G. W. DURANT. *Rensselaerville.*

Sorghum Syrup and Sugar.

There was over 2000 gallons of the Sorghum syrup made in this township the last season, and most of it, where the cane was sufficiently matured and properly manufactured, was of an excellent quality—far superior to any boughten molasses, not even the celebrated Boston syrup excepted. At different times, small quantities of well crystalized sugar were made from the best matured cane. There will be any quantity of cane raised next year. N. CASE. *Bury Hill, O.*

MESSRS. EDS.—I tried the Chinese Sugar Cane in 1857. I made some five gallons molasses of passable quality.—I think the subject deserves the attention of Agricultural Societies. They should get up the best mills for crushing the cane and let them out to farmers who will raise the cane, charging a moderate hire, and give the instructions how to make the best syrup. I made a very small quantity of syrup by squeezing or twisting the canes over a dish with the hands, and boiling the juice in a tin cup (without any alkali,) on a stove. The syrup was far superior to any I ever saw. It was in appearance and consistence like castor oil, and in taste like the syrup of pear preserves.

In the fall of 1857, I tried to procure the bi-sulphite of lime, in the city of Baltimore, without success. I was told it was always made to order. I substituted chloride of lime or bleaching powders. My molasses was free from acid, but was injured by being boiled in a thin copper kettle, the splashing up the sides of which burned and colored the molasses. Too much care cannot be taken to prevent burning. W. C. H. *Frederick, Md.*

Warts on Horses.

MESSRS. EDITORS—Having seen an inquiry in your paper for something to cure warts, please insert the following:

The most certain remedy is to cut the wart off close to the skin, and then apply a red hot iron to the root. If very small, they may be removed by the application of lunar caustic to the root after having been cut off. This is a certain cure if it is thoroughly performed. A LOVER OF GOOD HORSES.

Management of Manure.

We have often had occasion to urge the importance of the thorough intermixture of manure wito the soil. One of the chief reasons why fermented manure so often proves superior to unfermented is the facility with which it may be pulverized while working in by plowing and harrowing. Repeated experiments with fresh manure, made by plowing it under in the usual way, in one instance, and by thoroughly grinding it into the the soil by means of what is termed a *drag roller*, in another; have shown the beneficial effects of the latter treatment on the crop to be more than double the former. In corroboration of these views we condense into a brief form the statement of an experiment reported by H. C. White of Barre, Vt., in the New England Farmer. He cuts all kind of fodder except hay before feeding, which causes all his manure to be short and easily spread and intermixed with the soil. He breaks up his green sward eight or ten inches deep, late in autumn; in the spring the sod is rolled, and the fresh short manure is drawn out and spread upon it at the rate of fifteen to eighteen cords per acre. It is thoroughly mixed with the soil by the harrow or cultivator, and just before planting it is plowed three to five inches deep and harrowed again. This treatment has given, for the last three years, 60 to 70 bushels of corn per acre. The success is attributed no doubt justly to the thorough mixture of manure and soil, the product of corn, oats, potatoes and hay being about double the amount "under the old system."

How to Raise Early Potatoes.

Messrs. L. Tucker & Son—As I have never seen the plan, adopted here, in raising early potatoes, mentioned in any Agricultural paper, I herewith give it. About six weeks previous to the usual time of planting in the open ground, mark out a piece, say five or six feet wide, and as long as required, on a dry and sheltered piece of land; dig out the surface to a depth of five or six inches; place boards around, to keep up the loam or sand; then fill to the depth of six inches, with horse or some manure which has been thrown over to produce heat; tread it down lightly, as for a hot-bed, and cover the manure with four inches of loam. I keep some in my barn cellar through the winter, to be ready at any time. It is also well to keep the ground covered through the winter, where the bed is to be made, with straw or something to keep out the frost. Then pack your potatoes as close as you can, over the surface, a single thickness; cover with four inches of loam, or what is better, sand, as the sprouts are tougher and do not separate so easily from the potato in lifting. I cut my potatoes a day or even weeks before, and place them cut side down. At night cover with straw or coarse hay; in the morning, if mild, and no rain, rake off the covering and replace at night. In case of continued dry weather a slight watering may be of service, though seldom necessary. When the time for planting arrives, land manured and furrowed, take up the front board, and with a dung-fork lift as many as it will hold; give them a shake, and separate each plant carefully by hand, placing them in a basket or box; then drop them, either for hills or in rows, and have a person follow to cover as fast as possible, placing an inch or two of earth over the tops, through which they will break in a few hours.

If planting has been delayed from any cause, and the plants should have attained considerable growth, (I have planted them when a foot high and had them do well,) lay them down and cover as above. If your field is not too far from your dwelling, make the bed there, as it saves exposure in carrying the plants to a distance. With a few boards and stakes a shelter can be made to keep off the cold winds.

By sprouting potatoes in this way you can have them ready to dig at least three weeks earlier. A Jamaica Plain Farmer. *Mass.*

The Best Time to Sow Peas.

Eds. of the Co. Gent.—Your correspondent G. Butts, in your paper of the 16th, asks the question referred to in the caption above.

1. I have raised many peas, of many sorts, for market, both in garden and field culture. Those sowed early have, with great uniformity, produced the best crops. Peas sowed late are injured by dry, hot weather, and almost always mould more or less, and so produce a lighter crop. The cold freezing weather that often occurs in April and early May, does not injure peas once in ten years.

2. The pea-bug—alas, I know of no certain means of resisting this almost omnipotent enemy. The assertion that he may be avoided by very early sowing, is simply not true. It would seem that the pea-bug finds other places for the deposit of his eggs, in the absence of the pea-pod. Hence it is that clean seed, sown on soil where peas have not recently been grown, does not avoid him. The pea-bug, however, may always be cheaply and thoroughly expelled from the seed you are about to sow. Let your seed be well dried in the fall, and put up in close vessels. When you are about to sow them, turn them into a tub of water, when you can readily skim off and destroy every bug. Thus you will somewhat diminish your enemy. I do not esteem the presence of the bug in peas so great an evil as some other persons do. As the bug always deposits its egg in the side of the pod, and not in the edge, so the germ of the seed is rarely injured by it. True, the amount of food furnished by the body of the seed, is diminished just in proportion to the amount eaten away by the bug; but this is usually so small in proportion, as to make no great difference in its strength of early growth. For the table, the injury by the bug is small. The green pea, as shelled for the table, contains but the egg, and so is not greatly injured. To those who cook the pea as a winter food, and those dishonest persons who purchase (as many do,) and mix it with coffee, the presence of the bug is a serious drawback. C. E. Goodrich. *Utica.*

Value of Coal Ashes.

Editors Cult. and Co. Gent.—The question is frequently asked, are coal ashes good for anything for manurial purposes? to which I can answer, yes. I have used them more or less for the last twenty years—the anthracite for the most time, in Rhode Island, and the bituminous here in Ohio for the last four years, and I should as soon think of throwing away my wood ashes as my coal ashes. To tell you when and how I have employed them with benefit, would lengthen out this communication beyond the limits of the patience of your readers; suffice it to say that as an absorbent for highly ammoniacal manures, I think them invaluable. I have also found them very valuable in rendering a stiff soil light and porous, and a light sandy soil compact. I have a piece of ground which four years ago was a coarse yellow sand; by composting my hen manure with coal ashes, the sweepings of the wood-house, the grass and weeds of the yard and garden, and the slop from the chambers, the soil is getting quite dark and compact, and I have been enabled to get the same crops off the same ground year after year. Indeed such sweet corn and cabbages as I have had year after year, would be hard to beat. In the Cultivator for April, 1851, you will find an analysis of the red and white anthracite coal ashes, by which it will be seen that the insoluble matter is 88-85 per cent. Now if you have the Transactions of the New-York State Agricultural Society by you, you will find by turning to one of the volumes about the year 1846, (as it is many years since I saw it, I cannot tell exactly,) an analysis showing that from 38 to 42 per cent. or nearly one-half of the amount of insoluble matter is alumina, a greater proportion than most clays possess; it is therefore more valuable than clay as an absorbent, because while it will fix more ammonia, it is less adhesive. C.

P. S. I wish you would publish the analysis from the New-York Report, and also if you can find it, the analysis of the ash of the bituminous coal, mentioned by Prof. Norton on page 137 of the Cultivator for 1851. We have a great variety of bituminous coals here in the west. I have heard that soap has been made from some of them. How and where shall we get an analysis of them. C. *Cleveland, O.*

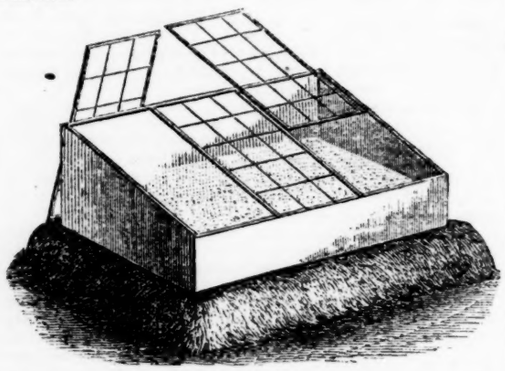
N. B. To get the full benefit from coal ashes as an absorbent and deodorizer, they should be used fresh or kept dry.

Formation of a Hot Bed

Taking into account the rapidity with which the summer succeeds spring, and how tardy the advent of spring seems to be, any means by which we can advance vegetation a step, should be adopted, if not involving an undue expenditure. The hot-bed is a simple and economical method of promoting the early vegetation of choice seeds, of esculents, &c., so that by the time the severe frosts have disappeared, we may transfer to the garden our plants partly established. The flower garden may be spared a small corner of the hot-bed also, for the raising of a few choice annuals, of which we shall speak in another place.

The expense of constructing or getting up this HOT-BED frame is not overwhelming, though plans have been proposed to cheapen the luxury still more. A frame of three lights or sashes will be found sufficient for a small garden. It is formed of a frame or box about six feet wide by twelve feet long, with sloping sides and a higher board at the back, which is to be placed to the north, with cross bars, to be fastened by hooks and staples, as this proves the most convenient method of removal; these cross bars support the sashes. The sashes are generally glazed with six by eight inch glass. Any person may thus compute the probable cost of such a frame in his own vicinity, requiring boards for the frame, cross bars, and three sashes six feet long by three feet eight inches wide, allowing four inches for each sash to rest and the cross bars.

The material to create the bottom heat is the next consideration. This must be long stable litter, which, if of the right quality, may be mixed with a portion of leaves from the wood. The litter should be laid in a heap for some days before use, in order to allow it to commence heating. About four waggon loads will be sufficient. The ground for the frame having been selected, sheltered if possible on the north, and well exposed on the south-east, throw out a shallow trench, and lay the soil taken out in a ridge along the margin of the intended bed; this forms a sort of base to prevent the litter from being scattered about. Then shake the litter regularly in layers, beating it gently with the back of the fork as you proceed, to consolidate it; if leaves are used, lay them in alternate layers; too great a layer of leaves would prevent fermentation from going on as rapidly as desirable. The heap should have a gentle slope from back to front, and should be, when formed, about three and a half or four feet high at back, and three in front; it will gradually subside. On this heap lay the frame; the manure should be allowed to extend about a foot beyond the frame on all sides, as shown in the annexed cut. Keep the sashes close, and covered with mats, for two or three days, till the heat arises, and when fully up, cover with six inches of light loam and leaf mold of the richest quality which should be carefully selected.



When the heat comes up, a little air is required, and space to permit the escape of steam, by tilting up the sash. In a few days the heat will moderate, when seeds may be sown, either in small compartments in the top-dressing of soil, or in boxes or pans, slightly "*plunged*," as we term it, in the bed. The only danger is from the generation of too violent a heat, and the prevalence of steam from the fermenting materials. Tan-bark has been successfully used to cover with, as this keeps the steam from rising; this cannot be employed where seeds are sown in rows, without the use of boxes or pans. We have perhaps devoted an undue space to the method of preparing a hot-bed. We sincerely hope that even one individual may be benefitted by the details of what is to many a thrice told tale.

To Make Turtle Bean Soup.

EDS. CO. GENT:—My family have enjoyed Turtle Bean Soup so much that I send you a receipt for making it. Yours, &c., I. S. C.

Get a piece of good beef,
Of a butcher or thief,
Which boil in five quarts of water;
Add beans, just one quart,
Of the genuine sort,
And 'twill make you good soup—*or it ought to.*

Soak the beans over night
Or you'll find their skins tight.
When press through a course wire sieve;
Boil four or five hours
And then by the power
Some fat on the top you'll perceive.

If the lady who cooks
Has studied her books,
She'll know how to skim off the fat;
Add in the season,
To the best of her reason,
If she don't, 'twill surely taste flat.

Let it go back to pot,
To make it quite hot,
Half an hour or so before dinner;
A lemon then slice,
You'll find very nice,
And you've soup for a saint or a sinner.

Lindenwood, N. J.

Temperature of Cream for Churning.

MESSRS. EDITORS—As I am a reader of the COUNTRY GENTLEMAN, I wish to say something in regard to churning cream for butter. As to the temperature at which the churning should be done, in the statements which I have read, some have thought the finger and others the thermometer, was the best way to test the proper warmth of cream for churning. To say that the temperature should be between fifty-five and sixty, as some have said, or between sixty and sixty-five degrees, as others have said, is very indefinite. I think there is a degree exactly right, at which butter will separate from the milk and gather quickly, without being too soft, and that I have fixed in my own mind, by my own experience, at sixty-five degrees. In the summer season, when the atmosphere is warmer than the cream, I want it to be at sixty-three degrees at the commencement of churning, and if the cream is in good condition it will bring butter in about twenty minutes. Cream that is warmer than sixty-five degrees will make butter too soft; and any temperature that is below sixty-three until it comes to sixty, will increase the time of churning about five minutes for each degree; and when it is below sixty, it will lengthen the time of churning about ten minutes for every degree until fifty-five, when I hardly believe it will come at all.

As for using my finger to determine the warmth, I would as lief depend on using my finger to tell when the atmosphere was below zero. J. R. D. *Cherry Valley.*

Artichokes as Stock Feed.

Mr. Kathbone of Marietta, O., writes to the *Ohio Farmer* in regard to a crop of artichokes raised by himself: "In March and April, I fed a great portion of my crop. My horses would leave corn to take a supply of artichokes. My cattle are also extremely fond of them. The fact is, that there is no root crop to my knowledge, that can be raised as *stock feed* to so much profit. They can be produced at a cost of from five to ten cents a bushel."

Seeding-Down on Oats vs. Wheat.

It is the generally received opinion that wheat is a better crop to seed down to grass than oats, and our own experience has favored this view. G. E. Brackett of Belfast, Me., writes the *Genesee Farmer* that, "in a field, the whole of which received the same amount of manure, and the same treatment, one portion was seeded in wheat and the other in oats. On the former, the crop of grass fell short the past season, and it requires breaking again; while the latter yielded an average crop."

Plowing.

The manner in which many farmers plow their ground for their hoed and grain crops, would naturally lead to the conclusion that they thought the thorough inverting and pulverization of the soil by the plow, harrow, &c., preparatory to planting or sowing the seed, was a matter of little consequence; consequently they practice the cut and cover system, as though the sooner they got over their fields with the plow the better.

The greater or less cost of labor, in the culture of hoed crops, depends very much upon the manner in which the land has been plowed.

Different kinds of soils require differently constructed plows. We have never yet seen the plow adapted or constructed so as to make the best kind of work on all soils. A good green-sward plow requires a differently constructed mould-board from that of the stubble-plow. Some soils require, for efficient work, a heavy plow and a strong team. On other soils, a much lighter plow and less team will do the work equally well, and at a much less cost. Farmers differ very much in their views as to how green-sward should be plowed; whether the furrow slice should be completely inverted, or left at an angle of forty-five degrees, the furrows partially lapping. Says an English practical farmer,

"The true and correct practice in plowing, as ascertained by long experience, is to lay the furrow slices at an angle of forty-five degrees—that is, the furrow must be about one-third more in width than in depth—or as six inches to nine, or seven inches to ten, &c., &c. It is thus that the greatest amount of soil is exposed to weathering influences; besides, in this way it must, if properly done, lie close; no hollows, no "hog troughs," but one uniform series of furrows, in the best position for the harrow to work with the greatest effect and usefulness, and thus the most readily to secure the disintegration of ammonia and its subsequent deposit. Good plowing, then, exposes the most surface to the air; it provides best for subsequent harrowing, and also prepares it, when well broken down, for better and more consistent consolidation, so that no hollows supervene between the surface and furrow sole. These important ends are requisite for the best sustenance of nearly every crop."

Lapping the furrows as above described, is advocated by some farmers, while others as strongly advocate the most complete inversion and shutting in of the furrow slice. On heavy clayey or naturally moist loamy soils, the angle turned, or lap-furrow, may prove the better method of plowing. But we think a large portion of our farmers prefer a plow that will completely turn the furrow "down side up," and put the grass, stubble, &c., out of sight.

On light, sandy, and gravelly soils, in sections of the country where the crops are liable to suffer from late summer drouths, we think the flat furrow system best. Where the sod of a grass field has been turned over flat, the buried stubble and vegetable matter in course of the summer becomes a spongy mass, absorbing and retaining the moisture that rises from the subsoil; this moisture hastens the decomposition of the vegetable matter of the sod, and at the same time very much arrests the bad effects of the drouth—as the moisture does not readily ascend to the surface of the field and escape into the air, as would be the case if the plowing had been badly performed, and much of the turf torn up by the harrow, as is sometimes the case.

The difference in soils, seasons, manuring, &c., is so great, that it would be idle to lay down any specific rule that would apply in all cases, as to the angle at which the furrow slice should be turned, or to what depth the plow should penetrate. Long years of practice will confirm one farmer in the belief, that plowing to the depth of four or five inches will give him the largest and most profitable crop of corn. While another, with a strong team, and the largest sized double or Michigan plow, will turn up his broad acres twelve inches deep, and sixteen-inch wide furrows; he is confident that he gets larger crops of corn, and better grain and grass crops. Other farmers practice plowing a medium depth between these wide extremes, and are satisfied with the results—and they seldom vary in their usual routine of farming. A greater depth of plowing than has been practiced by many farmers, would doubtless prove advantageous; this, however, depends much upon the nature of the subsoil. Such is the cold, acid, irony nature of some subsoils, that if two or three inches of them were turned up at one plowing, it would result in great injury to the crops for several years, unless heavy dressings of lime and manure were applied. Carefully conducted experiments in these matters, are safer guides than any theory not founded on the results of varied practice.

Draining Plow.

The Country Gentleman of 25th last November has just fallen into my hands, and your article on Cost of Cutting Drains, &c., pleased me greatly. When at your office last summer, I inquired for the Ditching Machine of Pratt & Brother, intending to see, if possible, its practical operation; but it was not to be found.

Your improvement is very important. Will you be so kind as to state for the information of your readers generally, as well as your humble servant, the "peculiar construction" of the plow, &c., more fully—or if this does not suit to do, if it will be for sale at Albany next summer. It should be for sale, and introduced as one of the most important labor-saving machines. A. Berry. *Raymond, Miss.*

The ditching machine of Pratt & Brother, although an ingenious invention, and promising highly at first, was found on account of its great weight and complexity, to be very liable to get out of order and also very difficult to manage. We have given it a thorough trial on different soils and on different places, but on the long run, we found its use impracticable. As a consequence, it is no longer manufactured. The ditching plow, on the other hand, is remarkable for its simplicity, and with reasonable care, never gets out of order. A neighbor who had used Pratt's machine and thought it valuable, has since cut several miles of three feet drains, with a draining plow, and regards it as "incomparably better."

We intend at some future time to give a full description of the draining plow, with its various modifications and improvements, but are not prepared to do so at present. Our correspondent will find by referring to our advertising columns the particulars in relation to its place of manufacture and sale, &c.

Shoeing Horses that Overreach.

But few blacksmiths seem willing to learn anything new about horse-shoeing, or will admit that there is any *need* of it. But while they know no better plan to remedying over-reaching than making the shoes shorter, and placing the forward one on the toe and the hinder one on the heel of the horse, they need to understand that there is a better way, and the horse owners should make them practice it. E. L. Gibbs directs as follows in the *Ohio Cultivator:* "Make the forward shoes long, and the toe-calks short and standing a little under, and then set them as far back as convenient, in order to let the feet roll over as soon as possible to get out of the way. And in setting the shoes on the hind feet, reverse the order to keep them back, to give time for the forward feet to get out of the way. Make the toe-calks high and the heel-calks low, to keep the feet back, and then he will travel like other horses. This may be remedied in part in the mode of paring the hoof. This is essential in all cases, and where too many horses have been made cripples."

Sugar Cane for Fodder.

Many farmers who have raised the Chinese sugar cane for fodder have but partially succeeded in its use. It answers well for soiling in the fall, when taken just at the right time, or a short time before the seed ripens. At this period, its juice has become sweet and nutritive, and the stalks being soft and juicy, cattle eat the whole with avidity. But this period is of comparatively short duration—and does not continue so long as with the stalks of common Indian corn. After cold weather sets in, the sugar cane stalks become drier and harder, the sweetness is diminished, and they are not eaten. The expedient adopted with common corn, of sowing thickly so as to cause the stalks to grow small and tender, does not answer well with the sugar cane, the leading stalks outstripping the rest, and nearly preventing the smaller ones from growing at all. Yet, notwithstanding these difficulties, many are unwilling to relinquish the sugar cane, for it not only produces double the amount of stalks afforded by common corn, or ten or twelve tons per acre, but the seed being so much smaller, but little in quantity is required for seed, while less than three bushels of corn per acre will not give a full crop of stalks.

We have found a complete solution of the difficulty in the use of the cane in winter, in *Hickok's Stalk Cutter and Grinder*, noticed a few weeks since in this journal. It cuts the stalks and tears the chips to fragments with great rapidity, after which the cattle eat every portion freely. Although but a few days have elapsed since the feeding was commenced, the cows have sensibly increased in milk, from the sugary food thus supplied them. We intend as soon as opportunity presents, to procure accurately measured results from different kinds of food. The enormous productiveness of the cane, gives it a great advantage over any other kind of cattle fodder, as a single acre might be made to feed half a dozen cattle through winter, while the expense of raising it is but trifling, if the seed are sowed by a drill, and the crop cultivated by a horse. The cost we think need not exceed one dollar a ton. Could it be generally adopted as a fodder crop, it would greatly lessen the required extent of meadows, admit an increase of live stock on every farm, thus affording a larger supply of manure, and increase both the extent and acreable product of other crops.

Whale-Oil Soap for the Curculio.

MESSRS. EDITORS—I last season tried an experiment with the curculio, which I have never seen published, and it may be of some service to your readers. I have four as fine and thrifty plum trees as I ever saw. They have yearly been filled with fruit, but I have never ripened a single plum on either tree, until the last season. Having a number of rose bushes on which I was frequently using whale-oil soap, to kill the green-fly, slug, &c, I concluded to try the same on the plum. One of my trees branches from near the root in three branches, all about of the same size, and were all equally filled with fruit. On one of these branches I used the whale-oil soap, putting it on with a hand syringe, and covering thoroughly the whole of that part of the tree. This was done as often as three or four times a week, and oftener in case of rain. The part of the tree so treated, was loaded with fruit, and ripened them all; it was so full as to require support to keep from breaking. The other parts of the tree did not ripen a single plum. The other trees were jarred daily, night and morning, but I did not get a plum from either of them. This, to me, for a single experiment, was very satisfactory. I intend trying it more extensively next spring.

About one pound of the soap was used to eight gallons of water. D. B. LOGAN. *Morristown, N. J.*

Strawberries—Peaches.

MESSRS. EDS.—Can you inform me through the columns of THE CULTIVATOR, whether I can get strawberry plants in good order for Spring planting, from Albany—I mean will they bear shipment so far? (1.) How far can the *berries* be sent by railroad in good order for market, and how should they be put up? (2.)

I see it stated that peaches are damaged a good deal by the curculio in some sections. Is the remedy same as for plums? (3.) Would peaches be more likely to be attacked by the curculio if plums were planted in close proximity, or would it be a protection? (4.) WM D. CLARK.

1. Strawberry plants may be safely sent the distance indicated, if properly packed, or so that they may have air. Sacking is therefore better than tight boxes. Early in spring, before hot weather, they may be sent further than afterwards. 2. The berries are packed in small, circular, rather flat wooden boxes, so as not to crush each other. Many of these small boxes are then enclosed in a larger box. Strawberries are sometimes sent by railroad a hundred miles or more, but they are not so perfect on arrival as when fresh. Shorter distances are preferable. They should always be disposed of within a few hours of gathering, as they soon lose their freshness and fine flavor. 3. It is 4. Avoid every thing tending to increase or call them in—killing, in its different forms, is the only satisfactory remedy.

Cheap Hot-Beds.

The time is pretty near at hand for this work again. How many there are who neglect this useful adjunct to a country home. "Too far away from town—can't get glass," says one—"can't afford it," says another. Very well, here is something cheap enough, and easy enough; yet it will do, we feel very certain. It is from a correspondent of the *Valley Farmer:*

"My framrs are about six feet wide, by sixteen feet long, or just wide enough so that two widths of domestic will cover it, which are sewed together. Have cross-ties on top, just the same as for glass, say every four feet one cross-tie, to hold the frames secure, and keep up the canvass, which is tacked to one by three stuff the length of the frames, the same being a little wider than the frames and allowed to hang over all round. I wished to enlarge my forcing-beds last winter, and happened to try canvass. I prefer it to glass, being cheaper, and easier to handle, and does not break so readily. I shall still enlarge this winter. I give air by raising the lower edge; but it would be better to give air at the upper edge, which I shall try this winter. I did not commence my beds last season until the last of February, but this year I shall commence in January, and believe, by letting the air out at the top, I can start just as early as I could with glass, and have my plants as hardy, and with less attention, than to have glass. I put the oil on the domestic cold; perhaps it might be better to put it on warm. I will try it this season, as I think it will go further, but cold will do. I used linseed oil, and put it on with a paint brush."

March would be quite early enough for northern latitudes. Only fancy what a lot of plants of cabbage, tomato, &c., such a frame would furnish. E SANDERS.

☞ There are few County or District Ag. Societies, that publish as large and useful volumes of Transactions, as that of Essex Co., Mass., for a copy of which for 1858, J. W. PROCTOR will please accept our thanks.

Plan for a Kitchen Garden.

It is a very simple matter to divide the space to be devoted to the culture of esculents, if we make up our mind to pursue a regular system of cropping it. To effect this, we must reflect a little, and compute how much space can be safely appropriated to each item, allotting to the greatest favorites the most extensive compartments. Each family must determine this question for itself, as each has its peculiar tastes and preferences. One eschews cabbages, alleging that the perfume when cooking is very insinuating; another cannot use the parsnip; a third would devote a very large proportion to tomatoes; a fourth loves onions, and a fifth and sixth may differ from all these. Almost all choose LIMA BEANS, GREEN PEAS, and SNAP SHORTS, while early in spring a dish of ASPARAGUS or a choice Rhubarb pie, is seldom pushed aside by the most fastidious. Many of our readers, we presume, go in for every nutritive esculent in the catalogue. So decide for yourself, measure your ground, and the list will be furnished you of select sorts. We recommend order also, in the style and arrangement even of the *Vegetable Garden*. We would have the country gentleman and farmer keep their esculent garden so neat, that it might serve the cook and housekeeper, or any other domestic who may have no peculiar taste for flowers, for their flowor garden. We trust there are few such, however, though we confess to having frequently heard individuals exclaim, that the "choicest flower for them was a potato blossom or a pea bloom."

We would also decide at the commencement of the season, upon the location, for at least the main crops, if not all the vegetables intended to be cultivated, as well as the successional crops to follow these; and to secure this system, we should lay out the space into four or six principal plots or compartments—we shall say four at present. These may be of any extent, from one rood to an acre. They may even be so limited, as not to exceed a rod each; the plan may be carried out all the same. The ground appropriated, if very irregular, should be reduced to the form of a parallelogram—the square is the most convenient, cutting off by a walk the irregular portion, which may be divided off into beds of various sizes, for miscellaneous articles and small fruits, such as strawberries, &c. The chief object is to secure four equal squares of ground, for the prominent crops. To make ourselves understood, we annex a diagram representing a regular piece of ground, divided in the manner indicated—(Fig. 1.) The

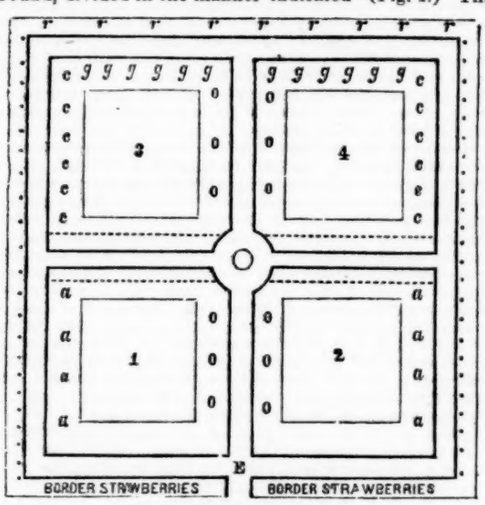


FIG. 1—EXPLANATION.

E. Entrance—*a*, *a*, *a*. Dwarf Apples—*c*, *c c*. Currants—*g*, *g*, *g*. Gooseberries—*o*, *o*, *o*. Dwarf Pear Trees—*r*, *r*, *r*. Raspberries— . . . Blackberries— - - - Grape Trellis—O. Fountain.

method of cropping it, we shall explain as we proceed. We have not drawn it to any scale—the same plan would be equally appropriate for one rod or an acre. Various other regular divisions might be substituted; we have chosen the above as the most simple. The entrance is at E, and a border surrounds the entire space, leaving four allotments with the necessary passages.

Potato Culture—One-Eye System.

MESSRS. EDS.—I wish to add my testimony in favor of the one-eye system of cultivating potatoes. Not having much confidence in the plan—I tried it on a small scale, planting *one peck* of very small "Mountain Junes," the largest not larger than a hen's egg. Cut in very small pieces, one eye to each piece. Planted in drills, dropping them six to ten inches apart. I did not expect much from them, but was greatly disappointed. You should have seen them roll out—great big fellows—many of them the size of a man's double fist. In the same ground, side by side, were common reds, in hills, one potato in each hill—produced very small tubers, though there were a good many of them, yet the yield did not compare with the others. "Well," said a brother farmer who saw them dug, "its a knock down argument." I intend to try it in field culture this year. OWASCO.

MESSRS. EDITORS—As one who finds profit in the weekly perusal of your valuable paper, I wish to thank you for your method of diffusing information among your numerour readers. It is practical information that we farmers need, and those who are not mortgaged to the past, may find it to their advantage to give up some "old fogy" plans of cultivation, and adopt the practice of others, whose plans, with the results, are so freely discussed in the columns of your paper.

I have a number of reasons for favoring Mr. HOWATT'S plan of raising potatoes. First, there is economy in seed—second, economy in labor—third, I have obtained a better crop, and of more uniform size.

I raise the "Davis Seedling"—cut my potatoes, having two or more eyes to a sett—drop them fifteen inches apart in the drill, and cover with a plow, leaving the field in ridges for ten or twelve days; then cross-harrow, making it level.

At the first hoeing I use a cultivator, at the second a double mould-board plow, and make clean cultivation. At this hoeing, sowed turnips and obtained a fine crop.

I harvested more potatoes and of a more uniform size, (there being comparatively no small ones among them,) than I ever have before.

I make this statement to offset a Kansas failure, hoping it may encourage some others to try this system, and give us their experience. M. C. W. *Lincoln, Mass.*

Scab or Itch in Sheep.

We should judge from the description given us by our correspondent in Fayette County, Pa., that his sheep are affected with the scab. We have inserted his inquiry in its appropriate place; and while waiting to hear from our readers, we give what Dr. Dadd says upon the management of this disease in his Cattle Doctor:

Scab, Itch, erysipelas, &c., all come under the head of cutaneous diseases, and require nearly the same general treatment. The following compound may be depended on as a safe and efficient remedy in either of the above diseases:—

Sulphur,	2 ounces.
Powdered sassafras,	1 ounce.

Honey, sufficient to amalgamate the above. Dose, a table spoonful every morning. To prevent the sheep from rubbing themselves, apply

Pyroligneous acid,	1 gill.
Water,	1 quart.

Mix, and wet the parts with a sponge.

Whenever the scab makes its appearance, the whole flock should be examined, and every one having the least abrasion or eruption of the skin should be put under medical treatment.

In most cases, itch is the result of infection. A single sheep infected with it is sufficient to infect a whole flock. If a few applications of the pyroligneous wash, aided by the medicine, are not sufficient to remove the malady, then recourse must be had to the following:—

Fir balsam,	half a pint
Sulphur,	1 ounce.

Mix. Anoint the sores daily.

Extraordinary Improvement upon a Small Farm.

MESSRS. EDITORS—There is an instance of farm improvement in this town, three miles from my residence, that justly deserves to be known to all appreciators and lovers of Agricultural advancement. I visited that farm last July, and was so struck with its altered appearance from that of former years, that I requested permission of its owner Mr. NATHANIEL SPAULDING, to make a statement in writing to some Agricultural paper, of the ways and means he had adopted and pursued to make such a distinguished mark in so few years—not only in the change and improvement of the soil, rendering valuable and fertile, what, a few years ago was comparatively of but little value and almost barren, but the change in the buildings, in the general aspect of the place—now comely, convenient and beautiful, where but a few years since it was the picture of desolation, uninviting in the extreme.

Mr. Spaulding assented to my request, and gave me a brief account of his operations, and though a sensible and modest man, appeared proud of his skill and success; and justly so, for he has certainly shown himself a benefactor to his race, for he has made more than one hundred spears of grass grow where none grew before; and if his example has the effect to arrest the attention and stimulate to exertion even *one* individual to do likewise on similar soils (there are enough of them in all parts of our country) it will be ample remuneration both to the author of these improvements and to the narator of the facts, and we hope also to you, Messrs. Editors, for the trouble of publishing them to your readers.

This farm consists of twenty-five acres, brook meadow, of clayey soil; some part of it approaching to swamp muck; and 17 acres upland, of cobble stone surface, in wood and pasture,—42 acres in all. Mr. S. informed me that he bought it at auction, and moved on to it in 1853—price $460. "An old shell of a house and barn," (to use his own expression,) was then upon it, "and some parts of the meadow so wet that a team could not be driven over it to get what little poor hay grew upon it" There was but little of it that could be plowed to advantage. From eight to ten tons water grass of poor quality was the product of the first year's hay crop. Mr. S. says he has made over 600 rods of drain. Main ditches, three feet wide, and from three to six feet deep; the bottom of the drains are boards; space 12 inches square, covered with flat stones, with shavings from the lumber with which he was erecting new buildings, and hemlock brush, thrown into the drain upon the covering stone, and then filled with earth. The cost of these main ditches averages 62½ cents per rod. His cross drains leading into the main ones, are four rods apart, 15 inches wide, stones (cobbles) thrown in loose, covered with brush, and filled with earth. The cost of these cross drains 30 cents per rod.

Mr. S. thinks the increase of production for the two years following the draining, paid the whole expense of making these drains. He is undoubtedly correct in his estimates, for this work was performed by himself and boys. Had he employed other labor, or contracted it out, at the high prices farm labor has commanded of late, it would hardly have done it; but he is a man that never puts his hand to the plow and looks back. He is emphatically a practical man, carrying out whatever he undertakes with an energy and skill known to those only of like determination. Above these drains where clover and timothy now grow so heavy as to lodge, a poor miserable water grass grew, scarcely worth the cutting and housing.

Mr. S. says the production of these 25 acres in 1857, only four years from the time he commenced on the farm, was 30 tons English hay, 350 bushels of corn, and 250 bushels oats. And this from a soil, though not exhausted, but so located as to be kept saturated and filled with cold spring water, to such a degree as to discourage and forbid cultivation only on the dryest parts and in the dryest seasons.

Those skeleton buildings, or mere apologies for house and barn of which Mr. S. speaks, have given place to a convenient and commodious stone house of permanent durability, three barns, with cellars under them, and other out-houses sufficient for every convenience, forming a group of farm buildings for durability and beauty not often surpassed in our rural districts. And all this is the work of one man and his family, in less than six years; for I think but little has been paid for labor, and that little to carpenters and joiners.

The value of this little farm has nearly increased to ten-fold in the hands of its present owner; and such an example cannot but have its effect in its immediate locality. Already the contagion is caught and some of his neighbors are beginning to construct drains. Tiles are now made here and find a ready sale. The reclaiming of wet lands and bringing them into fertility has been proved to be a paying investment; and thousands of acres in New England, now worthless or nearly so, are destined within the next ten years to become our most valuable and permanent grass lands; while other thousands of acres now too wet for the plow will be so drained as to become among our best grain growing lands, suitable for annual rotations of the grasses and the cereals.

And yet, lamentable as it is in this enlightened age of agricultural improvement, there are some in almost every community, and altogether too many that "follow the beaten track of their fathers;" they are wedded to old, and as they say, "to tried customs;" they seek no change, desire none, repudiate book farming, read no Agricultural paper, lest it detract from their stock of common sense. Even on this question of improvement by draining, I recently heard a farmer say, "it is hard enough to get a living from land as the Almighty made it without making it ourselves!" And so it ever will be hard enough for such a man to dig a living out of the earth any where, however fertile he may find it. J. W. COLBURNE.
Springfield, Vt., January 30, 1859.

General Farm Management.

MESSRS. EDITORS—In the Co. GENT., Dec. 16, you ask for one of your readers, of those having had some experience in dairying and stock keeping, how much stock can be kept on 100 acres. To answer that question satisfactorily, would unfold the whole secret of farming, and furnish ample means for columns in your paper, which I should like to see filled by those who have had more experience than myself.

My farm contains 93½ acres—deducting 10 acres for wood, 2½ for orchard, 2 for road, and one for garden, yards and lanes, it leaves me 78 acres, which we try to improve and cultivate. The usual number of cows I keep is twenty; some seasons we have more and have kept at other times but seventeen. They will average twenty, or a little over. A part of the time we keep three horses, never less than two—and sell, in fat pork and live pigs, $100 worth annually. For the last two years have done something in the line of wintering sheep, and sold from 200 to 500 bushels of grain yearly, and am sorry to own some fodder. I never raise any calves, and to keep the number of cows good, always buy, usually in the month of Sept. or Oct. I have about 40 acres in pasturing, from 15 to 20 in meadow, and the same amount in plow-land, that is sown or planted to spring crops. I like to seed down the second year after greensward plowing, and put on one bushel Timothy seed and 15 lbs. red clover to three acres, and usually get the best hay the second year. My meadows hold good from three to five years. I like to sow the largest breadth of the plow-land to Barley. It is a good spring crop to stock down on, and we raise no better straw to feed in Jefferson County. Those dry seasons and short crops of hay and grain, we had a few years ago, learned me a lesson, not easily forgotten, in the line of wintering cows on straw. I had 10 acres winter Rye each year, the straw of which my cows eat after this manner: The straw was cut with a good straw cutter in a large quantity at a time, and thrashed with horses after it was cut, until it was soft and fine, and looked like the straw in a well worn out bed. I continue the same practice yet. It was then thrown upon one end of the floor into a large heap, ready for use as wanted, at which time we would haul down on the floor in front of the cows enough to last about three days, and wet it with at least fifteen pails of water, and dust over a small quantity of wheat shorts, and stir it all up well. About two weeks before the cows are to come in, we change to Rye meal instead of shorts, and continue this practice as long as the straw lasts. After the straw is gone, we are not particular to stop mealing the cows until about the 10th of May, preferring always to change from rye meal to corn, oat, or barley meal, immediately after they begin to milk.

The amount of stock kept depends as much on the manner in which they are cared for, as on the amount of hay and grain raised.

I never feed one fork full of anything out doors. My manger is tight and smooth, and every day swept clean. Not a handful of orts, chaff, dust, or dirt of any kind is suffered to remain. I should say, as I am speaking particularly of myself, that I arranged and moved my barns so as to work them all into one barn, 86 by 41 feet—the floor the entire 86 feet in front of the manger. I have ample room for twenty-two cows and four horses. When

feeding straw we have orts enough to bed cows and horses all handy, and sometimes a surplus which is always saved until wanted, and when feeding cornstalks they are fed whole and the buts are taken to the straw cutter and cut, mixed with straw and thrashed and returned to the manger again. You will discover I care for but little litter in the yard, for my cows are not turned out until about 12 o'clock, and if stormy returned to the stanchions in less than one hour. In pleasant weather they sometimes remain out two hours. I prefer to have them in the stable, although I have a good shed the entire length of the yard where they run and get their drink. We keep a good sprinkling of slacked lime on the stable floor to prevent lice. This important item we learned from THE CULTIVATOR a good while ago. It has done us more good than the price of that sheet five years.

My cows are the common native, with now and then one imported from Canada, which are usually good milkers, and full aged ones in fair condition, will dress 600 lbs, and for the last few years we have made on the average, 185 lbs butter to sell per cow, counting farrow cows and all kept on the farm, and making no deduction for family use.

Your correspondent thinks his farm does not produce as well as heretofore, and what we are now doing is to give in our experience, and attempt to give a little advice, which we will do in the shortest possible way. First, by advising to put on the third horse on the plough, and turn up about four inches hardpan and undersoil that he has never seen, and sow that kind of grain best adapted to his soil with a generous amount of grass seed, and apply what manure he can get to his plowed land, and continue manuring the grass land on the surface, and we think he will soon see a favorable change, not neglecting to sow plaster on his grass lands and on the greensward crops of grain, which we have often found beneficial to ourselves. I have no particular cause of complaint, but the other part of our house hen-pecks us more because I often express a wish that I could buy and haul home dung, than for almost all other causes.

I never sold a bushel of ashes, but have bought many. They are always sown on grass lands, and mixed with lime and plaster for the potato crop. I have never summered over twenty loads manure in the barn-yard. It is all drawn out in the winter and early spring, and applied to plowed land or top dressing for meadows. I am always careful to make at least fifteen loads hog manure each year, which answers well for the garden, and sometimes a little to spare for the nursery and a carrot and turnip patch in the orchard. Perhaps your friend may think fifteen loads hog dung rather generous, but we add very materially to the amount of dung naturally made by the hogs, by throwing into the yard a few loads of leaves and muck from the woods, and occasionally throw in a little horse dung. And we have killed and boiled hundreds of sheep, and muttoned more beef cattle than farmers usually do. The bones from this source, and all the old dog fetches home, are carefully saved, and to dissolve them they are burnt a little and mixed with ashes, and sown with some profit.

The farm which we now own, and have for the last seventeen years, is a small one, and is about one-third of a large farm that was taken up and cleared fifty-seven years ago. Being the fartherest part of the farm from the buildings, there was but little manure returned to that part of the farm that I now own, until I purchased it, and commenced the managing of it myself. Since that time we have tried to do the best our health and circumstances would admit, and one year ago last haying Gov. MATTESON of Illinois, visiting us after an absence of some twenty years, expressed his astonishment at the growth of our hay, and wanted to know where I procured dung to keep up the richness of our farm. He said I cut better hay than grew on the same farm twenty-five years ago. Not thinking I deserved the compliment from the Governor, I made him no answer, but will tell your friend I got the manure in my barn-yard. DANIEL PARKER. *Watertown, N. Y.*

Corn Culture—Plowing and Manures.

MESSRS. EDITORS—As much is said about raising corn, the depth of plowing, manner of culture, application of manure, variety of corn, &c., I will simply state my mode, and the result. My soil is red slate, on a hillside facing east, and dry. I usually plow with a straight plow, and, as we term it, carry my furrows, returning in the same furrow, and plowing what we can, making in all a furrow six to eight inches deep. This is sod ground, as I plant no other. I plant as soon as possible after the 10th of May, rowing sideways of the hill, and three feet between rows, and two and one-half between hills, cultivating and hoeing twice—the first time as soon as I can conveniently follow the rows.

I am an advocate for plowing under manure, not so much for the benefit of the present crop, as for the second crop and the seeding to clover. The past season, I broke and planted eight and three-fourths acres, with a small eight-rowed variety of corn,(smaller than the King Philip,) called Tucket corn, with no other manure than ten barrels of plaster and ashes, applied immediately after coming up. The field being high land, never had a load of manure to my knowledge. I laid out twenty-seven days' work on the field, to plant, ash, cultivate and hoe *twice*, and I harvested one hundred and thirty-three bushels of ears to the acre—equal to sixty six and one-half bushels shelled corn to the acre. W. J. *Otego.*

Iowa Farmer's College, &c.

DESMOINES, IOWA, JAN. 15, 1859.

TO THE EDITORS OF THE COUNTRY GENTLEMAN—This has been quite an Agricultural week in this city, owing to the annual sessions of the Board of Trustees of the Iowa Farmer's College, and the Board of Directors of the Iowa State Agricultural Society, with delegates from all sections of the State from County Agricultural Societies. It was the first meeting of the first named, to take measures for the selection of a farm, and for the government of the College. There were nine Trustees present out of thirteen named in the act incorporating the institution. The deliberations of the body excited considerable interest, and were attended throughout by a large number of spectators. There were some seven propositions to donate lands, monies, &c., in value from $5000 to $30,000. A committee was appointed to examine the sites offered, and any others that may be offered previous to the first of May next, who are required to report upon them at the next meeting of the Trustees in June. From the desire which the citizens of many of the counties have exhibited to obtain the location of this Institution within their borders, it may fairly be presumed that lands sufficient to meet the requirements of the act (640 acres,) and money sufficient to improve them will be donated to the College, which, with the $10,000 appropriated by the State, and the proceeds of five sections of land in Jasper county, will be sufficient to meet all its wants for the first two or three years. By the terms of the act the location must be made by the first of July next.

A committee of three of the Trustees was appointed to correspond with gentlemen over the Union, with the view of obtaining a President and Professors for the College, for the action of the Board at its next session. Any one reading this, who knows of any person competent to fill any of these chairs, would confer a favor upon this new institution by sending their names and qualifications to the Secretary of the College at Desmoines, Iowa. I presume the salaries will not be very attractive at first, yet there may be many who would consent to take them who are every way competent.

WM. DUANE WILSON of Desmoines, the present Secretary of the College, was re-elected for the term of two years; and RICHARD GAINES of Fairfield, Jefferson Co., was elected Treasurer, to serve for one year.

The State Agricultural Society have located their fair again, for this year, at Oskaloosa, Mahaska county. Z. T. FISHER, Esq., of Mahaska Co., was elected President for the ensuing year; W. W. HAMILTON of Dubuque Co., Vice President; J. H. WALLACE of Muscatine Co., Secretary, and ROBERT SEEVERS of Mahaska Co., Treasurer. Interesting essays were read in the evenings, on several of the most important branches of Agriculture.

A District Agricultural Society was formed during the week, embracing some eight counties, of which this (Polk) county is the center.

Iowa is advancing rapidly in all that pertains to disseminating informaiion in regard to practical agriculture. Out of about eighty organized counties, she has already sixty-two County Agricultural Societies, perhaps a dozen of which, however, have been so recently organized that they have had no opportunity of holding fairs. There is paid from our State Treasury annually, about $15,000 to the State and county societies. This is doing very well for a new State. * * *

Great Yield of Indian Corn.

According to a statement in *The South Countryman*—(a new monthly Agricultural journal commenced the present year at Marietta, Geo., and of which C. W. HOWARD, Esq., is editor)—Dr. J. W. PARKER of Columbia, S. C., grew the past season, *two hundred bushels and twelve quarts* of good sound corn on one acre of land. The certificate of the surveyor who measured the land—with the certificates of four gentlemen who certify that they "superintended the harvesting and measurement," and that "the manner and measurement of which we regard as accurate, and such as would be entirely satisfactory to us if we were buying," are given. Mr. HOWARD writes us that "all the parties whose names are connected with this statement, are of the highest respectability."

Dr. Parker gives the following account of the manner in which this extraordinary crop was grown:

The ground selected for my experiment, was sand hill branch land; after drying it by underground drains, it was broken up with a common tongue plow in November; about 25 two-horse loads of manure from my cow-house, were spread over each acre in December, and well plowed in with a two-horse iron plow (Glaze.) followed with the subsoil plow, drawn by two mules. About the first of March, another coat of good stable and cow manure was spread and plowed in as the first. Early in April, three cart loads of air-slacked lime, and two sacks of salt, were spread over it, and lightly plowed under. On the 14th of May, the ground was thoroughly plowed with Glaze's large iron plow, harrowed level and laid off thirty inches apart with a shovel plow. Guano and Plaster were sprinkled in the furrows, near 200 lbs. of the former, and 300 lbs. of the latter, to the acre.

The seed selected for planting, was from North Carolina, and designated "Bale Mountain Corn." After soaking it during the night in a strong solution of nitre, it was planted from 8 to 12 inches distance in the row, covered it with hoes, and rolled the ground, leaving it perfectly level. On the 14th, it was plowed with a long, very narrow plow, and dressed over with hoes. On the 5th and 17th of June, the same work was repeated, each time leaving the ground level. About the first of July, it was necessary to draw a ridge about the roots of the corn to prevent its falling. During a protracted drought, it was twice irrigated.

The preparatory plowing, sub-soiling, planting and culture per acre, sums up	$16 50
Salt and lime,	5.50
Guano,	8.00
To which add domestic manure worth	25.00
Total,	$55.00

Bucks Co. Ag. Society and Mechanics' Institute.

The Annual Meeting of the Society was held at the Newtown Hall, on the 20th January--the President in the chair. The record of proceedings of last meeting was read and approved. After the transaction of the usual business of the Society, and nominating officers for the ensuing year, the Society adjourned for one hour.

On re-assembling, John Bamsley, E. G. Harrison, and Edward H. Worstall, were appointed tellers, and the meeting proceeded to an election by ballot. After receiving and counting the votes, the tellers reported the following persons as duly elected:

President—WILLIAM STAVELY of Solebury.
Vice-President—Robt. Longshore of Lower Makefield.
Rec. Secretary—John S. Brown of Doylestown.
Cor. Secretary—Edmund G. Harrison of Middletown.
Treasurer—Jacob Eastburn of Solebury.
Managers—Gen. W. T. Rogers, Jas. C. Cornell, Adrian Cornell, J. Watson Case, John Blackgan Jonathan Knight, J. Paul Knight, James W. Newbold, John Kelsey, Samuel Buckman, Capt. Joseph Eyre, Lewis Buckman, Silas Carey, Hector C. Jones, John Robbins.

The President, on resuming the chair, in a brief speech, thanked the Society for the renewed expression of their confidence, and pledged his devotion to the interests of the Society, and his efforts for a faithful and impartial discharge of his duty.

The Society was numerously attended: everything passed off with entire harmony, and after some further proceedings, and the passage of a resolution to hold the next exhibition for two days, the Society adjourned.

Farming in Connecticut.

Products of a Fifty-Six Acre Farm—Onions and Carrots grown together, &c.

MESSRS. EDITORS—Although I have had only five years experience in carrying on a farm, as the committee of the New-London County Ag. Society have seen fit to award me the first premium for the best cultivated farm in the county, I will presume to let you know what I have been doing this year. My farm consists of 56 acres, four of which is woods, about sixteen of pasture, and three of orchard. I took the first premium for the best quarter acre of onions. It yielded 188 bushels of onions, and 112 bushels of carrots, making 300 bushels on one-quarter of an acre. Not a bad crop for land that my neighbors said would not raise onions, when I first took the farm five years ago.

Now for what I have raised the past season:

1000 bushels of potatoes, at 62½ cts.,	$625.00
2500 lbs. of pork, at 8 cts. per lb.,	200.00
260 bush. ears of corn,	150.00
300 do. onions, sold for	153.62
600 lbs. of butter, sold for	137 00
180 bush. of oats,	90.00
160 do. carrots, sold for	50.00
100 do. apples, sold for	62.50
746 lbs. of veal, sold for	38.39
112 dozen of eggs, sold for	18.00
200 lbs. poultry,	25.00
10 bush. of beets,	6.00
8 do. buckwheat,	6.00
8 do. quinces, sold for	8.00
2 do. beans,	4.00
	$1,573 51

I have sold 800 bushels of potatoes at an average of 64 cts. per bushel, and I have between 200 and 300 more to sell, so I have called them 1,000 bushels at 62½ cts. Pork probably will be more than eight cts., and my hogs may weigh more. My corn I think will shell more than 150 bushels. Oats sell for 50 cts. in the crib, they being clear of foul seed.

I have raised two of my calves, which are now worth $25, and have kept one yoke of oxen, two horses, seven cows, one two-year old heifer, and two yearlings. I make about 250 loads of manure a year—use a ton of guano, and two tons of plaster. Shall use the coming year in the neighborhood of 1,000 bushels of ashes. S. N. *New-London Co., Ct.*

We wish our correspondent had added to the above, the expenses for carrying on his farm for the year—also its increased value, caused by its improved condition, over what it was, when he purchased it five years ago. Over $30 per acre, where about one-third of the land is is pasture, is a pretty good income certainly. How many farms come up to this mark?

Feeding Cornstalks for a Change of Food.

MESSRS. TUCKER & SON—Allow me to say that your correspondent "J." of Niagara Co., "writes right well, and like a country gentleman," on the subject of feeding cornstalks, equally as to time and manner. On this topic, what he has done and said, is well done and well said. But a few more hints might be added, which I will attempt to do.

A change of food through the astringent weather of the winter months, is admitted on all hands to be not only useful, but positively necessary, and, though others prefer watery roots in the winter, as they have probably sufficient reason, and certainly a good right to do, I prefer dry food for winter, which seems to me more seasonable than snow in harvest, or roots in frosty weather. Fully conceding the economy of a frequent change of food, I also endeavor to practice it.

Accordingly, although I put up 90 tons of hay, and have more than enough, it was obvious that hay—hay all the time, would cloy the appetite of the most healthy animal. We therefore cut up the corn, and have been feeding out the stalks *twice* a week, since the ground was frozen hard enough to bear the ox team and sled. So far this change of food works well; the cows and colts appearing to relish a change of rations most decidedly; and, judging from appearances, we see no reason to doubt the economy of so feeding cornstalks through the winter, to keep stock in good health. We move to continue, and hope there will be no opposition to the practice. J. W. C. *Wisconsin.*

Culture of the Watermelon.

EDS. CO. GENT.—There are few people that do not like watermelons; yet we find few of our farmers who grow them with any degree of success in their gardens. It is partly to name two very good varieties I have grown, and to give some hints upon their management, that I write. The varieties are the Pomarian and Bradford—the latter is the best, and superior to any watermelon I ever grew. The seeds of both you sent me last April. I started my seeds in a hot-bed; set them out in a hill dug deep and large, made rich and mellow with sand. From my four seeds of the Bradford, my product was twelve fine-sized, well-ripened melons, beautiful both to the eye and taste.

There are three things to be observed, and requisite to success, in growing watermelons. First, early planting—the hot-bed will help us when the season is late. Second, a deep, rich, well-prepared soil. Third, it must be sandy, naturally or artificially. Observe these three requisites, and with proper care, success is always sure. To illustrate the necessity for a deep, mellow, well-prepared soil, I will mention that I measured roots from a hill of watermelons last autumn, which were over nine feet in length.

The Bradford watermelon is large size, very sweet, juicy, and tender; flesh fine red to the center; rind thin, about half an inch thick; seeds yellowish white, with a pink eye.

The Pomarian is a very fine melon, but not quite as good as Bradford, not bearing so profusely. JAS. H. HOPKINS. *Clark's Mills, Oneida Co., N. Y.*

Currant and Tomato Vinegar.

MESSRS. EDITORS—I wish to tell you how and of what I make vinegar. Last year, for trial, I took 14 lbs. of currants, mashed them as for wine, put them into a tub, and put two or three pails of water to them. Then let them stand several days, stirring it two or three times a day. After standing so several days, I strained or pressed it, and with molasses enough to make it as sweet as new cider, I had 10 gallons. I put it into a keg, and did not open it till Dec., when I found it to be as good vinegar as was ever made.

I use the pomace of the currant and grape for vinegar. After getting out the juice for wine, put the pomace back into the tub, and put water to it; stir it up and jam it up; let it stand, if it sours in the tub as well as if after pressing out the juice. Then I sweeten it till it tastes about like good apple juice just from the press.

Last summer I saw a recipe for making tomato wine. The writer remarked what a blessing it would be to the west if vinegar could be made from them. I knew that any fruit or berry that would make wine would make vinegar. I tried a little for wine and vinegar. I made but a few gallons for vinegar, and have let it stand in an open cask, and it is now good vinegar. Do not forget the sweetening. After this had stood a few weeks, I thought it was not sweet enough, so I sweetened it more. I also use the lees of my wine for vinegar; put water to it, stir it and break it up well; judge by the taste when you get water enough in. I do not leave but a little of the wine taste; sometimes I sweeten it more. Put the muddy looking stuff into a barrel; it will settle clear, and make as good a vinegar as cider.

The 10 gallons of vinegar that I made from 14 lbs. currants, ought to have been increased to 12—it was too strong. The vinegar I make from the pomace and lees more than pays the manufacture of the wine. D. B. RICHARDS. *Brewster's Station.*

Burying Money.

A Saratoga Co. Farmer, who put $100 under ground in the shape of drain tile, expense of laying, &c., gives the "facts and figures" in a communication to the *Rural New-Yorker*. He had a field of five acres never plowed, being very swampy or springy, except one and a-half acres; the whole overrun with weeds, and about worthless even for pasture. This he drained at a cost of $100, as above. The first crop (potatoes and buckwheat,) on four acres, returned the amount expended—the second, (potatoes and oats,) on the whole lot, gave $127; and the third (mostly corn,) was worth $226. Another advantage is that the drains give a permanent supply of water to four fields—the discharge never failing in the dryest weather.

"Dropsical Land"—Mr. Johnston's Remedy.

We seldom see a more forcible statement of the characteristics of a soil which draining will very decidedly benefit, than the following, from a communication to the *Boston Cultivator* by our old friend, Mr. JOHN JOHNSTON. He says:

"The advocates of drainage expect farmers to be possessed of common sense enough to discriminate between land that will pay for draining and that which will not. If there are those that cannot so discriminate, the draining of a few acres will show plainly whether it will or not, so that even if one has very little judgment in the case he need not essentially err. Every man may have observed that one part of a field will in general produce fine bright straw (it may be wheat or other grain) with plump heavy ears, giving a satisfactory return for seed and labor expended, while immediately adjoining such part of the field another portion produces dark colored straw (even if not rusted,) and, lean ears, with light unremunerating grain. Now did it never occur to the farmer to ask himself the reason why one part of the field brought good grain and the other bad? for surely he must see there was a local cause. I will tell how it is: the part giving good grain is sound, healthy land; the part giving bad grain is *dropsical* and diseased. Whatever manure may have been applied to it, did little or no good, and whatever vegetation it produced was unhealthy like itself. To prove what I say, let a ditch be dug in the sound land, and there will be no run of water, even in a wet time unless there is a snow-bank melting near by, which runs into the ditch from the surface. Then let another ditch be dug through the *diseased* land, two and a half feet deep, and in ninety-nine cases out of a hundred there will be a free run of water, and that coming at or near the bottom of the ditch. And if the *dropsical* portion is thoroughly tapped, it will bring for a number of years much better crops than the land that was healthy from the beginning. In many cases such land will pay the cost of draining by the excess of the first crop, where it can be drained for $15 to $22 per acre."

Remedy for Leaky Teats.

MESSRS. EDITORS—In answer to the inquiry of R. W., as to the remedy for cow's leaking their milk, I would say that I had a heifer that had a hole in the side of her teat, which gave as large a stream of milk as the hole in the end. And now for the remedy. As soon as she became dry, I took the twirl between my thumb and fore-finger, and pulling slightly, I cut it entirely out with a pair of sheep shears; before the cow calved again, the wound became healed, and with it the cow's teat was rendered as sound as the others, and it has remained so ever since I performed the operation, which was a number of years ago. I was careful to cut deep enough to get out all of the hard substance at the point indicated. J. H. C. *So. Amenia, N. Y.*

To remedy the leakage of milk, I should make a fresh wound up the passage when the cow is dry, and take a stitch in it to close it up. J. B.

After the cow is dried for the season, cut away the skin covering the orifice, and as far into the pipe as possible. If the hole is quite small, a hot wire may be introduced to remove the skin. Then sew up carefully, and dame Nature will finish the work. S. J. S.

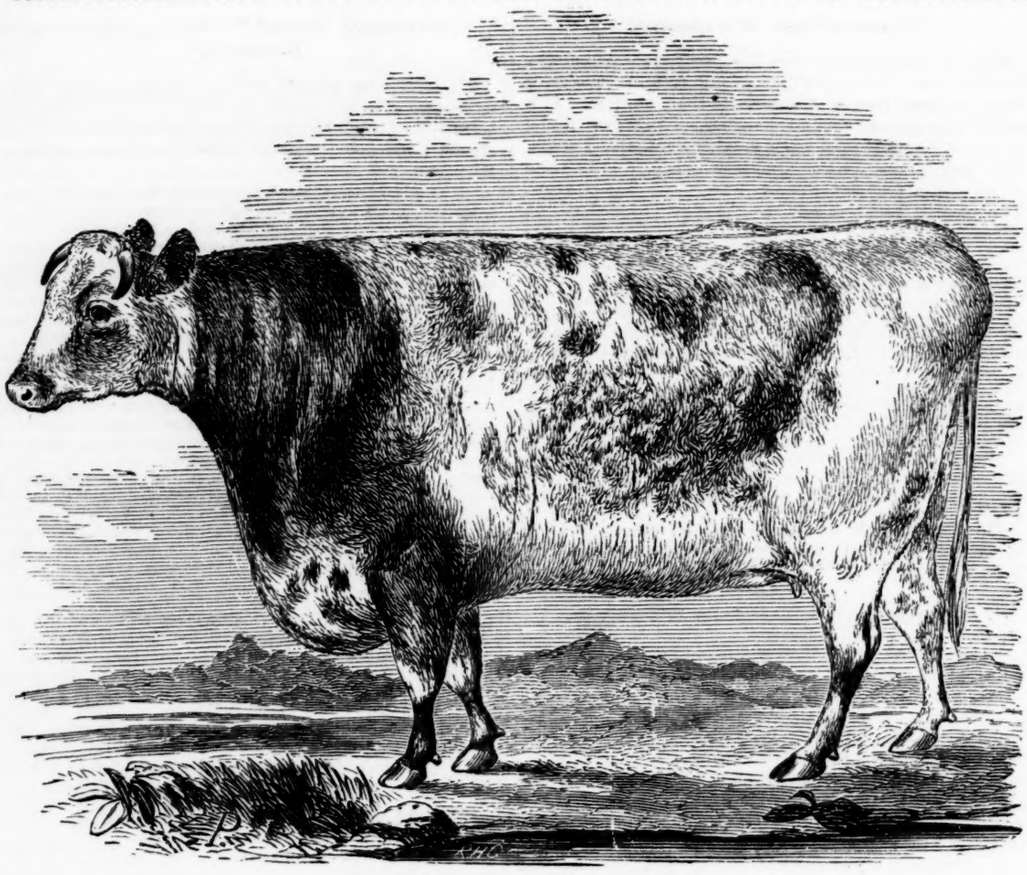
Cows Holding up their Milk.

To prevent cows holding up their milk, drive them with the head up hill or head down hill, or in a position in the stall so that the fore feet are raised considerable higher than the hind ones.

I do not say this is a remedy in all cases, but it has proved a good one with me. J. J. R.

Best Soil for Sorghum.

The Sorghum plant at the West differs much in quality, according to the soil on which it is grown. The *Prairie Farmer* gives the preference "to a compact marly soil. Even a stiff clay is better than the black loam of our prairies." The "barrens" (so called,) are still better—the juice is limpid and purer. High dry soil, on bluffs or side-hill exposures, is the kind.



Short-Horn Cow "Lady Booth."

The property of EZRA CORNELL, Ithaca, N. Y. Roan, calved December, 1850; bred by J. Emerson, Eryholme, England—got by Chilton (10,054) out of Rosabella by Buckingham (3239)—Rosalba by Highflyer (2122)—Rachel by Frederick (1060)— ——— by Planet (502.) Lady Booth won the first prize at the New-York State Fair at Saratoga, in 1853, as the best two-year-old heifer. She was also one of the cows that competed successfully for the herd premium at the United States Fair at Boston, in 1855.

New-York State Ag. Society—Annual Meeting.

The Society met according to notice in the Assembly Chamber, Feb. 9, the President Hon. W. T. McCOUN in the chair. The attendance although not as large in numbers as it has sometimes been, included many of the oldest and best friends of this institution from different parts of the state. The reading of the Treasurer's report, which was first in order, showed a balance of cash on hand of $2,650.93—the total receipts of the year from all sources having been $18,356.27, and the total expenditures $15,705.34. The Report of the Executive Committee was then read by the Secretary, Col. JOHNSON, comprising the usual review of the past year in the Society's history, as well as in the annals of agriculture in other states—tracing the steps of progress, while pointing also to means of further improvement, and referring particularly to several subjects now of especial interest—among them the gratifying increase that has been going on in the Society's Library, and the reasons—recently called in question—on which the Executive Committee based the establishment of the Society's Journal. A motion of acceptance and adoption having been proposed and carried,

On motion of Hon. A. B. CONGER, the customary committee of three from each judicial district was appointed to nominate officers for the ensuing year, and to recommend the place for holding the next Annual Fair. Hon. T. C. PETERS submitted several propositions for discussion after the recess.

On re-assembling in the afternoon, the Society accepted the report of the Nominating Committee, and voted to recommend to the Executive Committee that ALBANY should be the place of the next Fair, while the following officers were balloted for and unanimously chosen:

President—A. B. CONGER of Rockland.

Vice-Presidents—E. G. Faile of New-York; C. S. Wainwright of Dutchess; Herman Wendell of Albany; H. W. Beckwith of Washington; B. N. Huntington of Oneida; S. A. Law of Delaware; James O. Sheldon of Ontario; T. C. Peters of Genesee.

Corresponding Secretary—B. P. Johnson.

Recording Secretary—Erastus Corning, Jr.

Treasurer—Luther H. Tucker.

Executive Committee—Thomas B. Carroll, H. W. Dwight, E A. Lawrence, C. Boughton, Alrick Hubbell

The resolutions laid on the table by Mr. PETERS were then brought up for discussion—one recommending to the consideration of the Legislature a law requiring assessors to collect Agricultural Statistics—and another, recommending that the Executive Committee glean from the State collection of botanical works, the materials necessary for an illustrated book upon the Grasses of the State. In the debate that followed, Messrs.

Peters, Geddes, Osborn, Cornell, Faile, Newcomb, Gould, Conger, Johnson, Turrill, and several others took part, and after some modifications the resolutions were referred to the Executive Committee, as was also a resolution by Mr. EMERY, in favor of a modification and equalization of the tolls on Agricultural Implements, recommending that a uniform toll of not more than two mills be fixed by the Canal Board.

Other resolutions were voted, having reference to a more strict construction by judges of cattle at the Society's Fairs, of its standards of merit for the different breeds (submitted by Mr. CORNELL of Ithaca;) and approving of the objects and establishment of the Society's Journal (submitted by Mr. PETERS of Genesee.) Resolutions involving the subject of tolls upon railroads were laid upon the table after an animated discussion

In the evening Prof. NORTH of Hamilton College, read an address upon Trees and Tree-lovers, embodying in it an extended eulogy and sketch of the late A. J. DOWNING; after which Dr. FITCH gave a brief description of several varieties of insects into whose habits and ravages he has been carrying his investigations, pointing and illustrating his remarks by an interesting exhibition of specimens. After the completion of this address, although the hour was late, a debate took place, beginning upon some entomological points and closing by one of Mr. DICKINSON'S discursive and spirited speeches. The next day was devoted by the committees and spectators to an examination of the articles on exhibition in the rooms of the Society. The show consisted of butter, cheese, samples of grain and seeds, potatoes, fruit, sugar, dressed poultry, &c.; also quite a little display of Agricultural implements and machinery. The show of fruits, in consequence of the general failure of that crop the past season, was limited, but there was an unusually good exhibition of samples of grain and seeds, while that of butter and cheese we think equal, if not better, than has generally been contributed on similar occasions. Mr. GOODRICH of Utica, presented 105 varieties, all originated by him, of seedling potatoes, and other exhibitors also brought samples of considerable excellence. Mr. Goodrich, as our readers are aware, has made this subject a specialty for many years, and has contributed largely to the improvement of the Potato, at a period when the tendency towards deterioration has been marked and general. A special committee was appointed to examine and report hereafter upon his exhibition.

The premiums awarded we give below:

FARMS.

L. D. Clift, Carmel, Put. Co., grazing farm; 1st pr., $50
Grain farms, under 50 acres, S. Walrath, St. Lawrence Co., 1st pr., 50
Grain farms, over 50 acres, L. Sherrill, Greene Co., 2d pr., 30

CHEESE DAIRIES.

1. James S. Jackson, Leyden, $50
2. Norman Gowdy, Lowville, 30
L. S. Standring, Denmark, special pr., Silver Medal.
Clemence Whitaker, Martinsburg, specially commended.

BUTTER DAIRIES.

1. J. C. Collins, Lewis Co., $50

BUTTER.

Best 3 firkins, Wm. H. Pew, Lewis Co., $15
2d do., Hiram Mills, Lowville, do 10
3d do., L. L. French, Richfield Springs, Otsego Co., 5

Butter made June, August and November.

Best 3 firkins, B. S. Carpenter, Elmira, Chemung Co. $15
One tub, Miss Jane E. Mills, Lowville, 14 years old, very superior Special prem.

Winter made Butter.

Best, Ela Merriam, Leyden, Lewis Co. $5
2d do., Norman Gowdy, Lowville 3
3d do., Miss Walrath, Canton, St. Law. Co., Trans.
4th do., Miss Van Auken, Phelps, Ontario Co., Trans.

CHEESE.

Best, Norman Gowdy, Lewis Co., $15
2d do., Theron Van Auken, Phelps, Ontario Co., 10

ESSAY.

Robert L. Pell, New-York, on the edible fishes of New-York, plate, $100

DRAINING.

1. William Johnson, Geneva, $20
2. Jonathan Talcott, Rome, 10
S. Walrath, Canton, special premium, Silver Medal.

PREPARED GRASSES.

1. Mrs. J. T. Van Namee, Pittstown, $15

COLLECTION OF GRAINS IN STRAW.

1. Mrs. J. T. Van Namee, Pittstown, $10

WINTER FRUIT.

Apples—Best 20 varieties, J. W. Bailey, Plattsburgh, Diploma and $4
Best 10 do. W. P. Ottley, Phelps, Ontario co. Dip and $3
Second best do., W. Ives, Watertown, Barry and $1
Third do., J. M. Mattison, Tompkins co., Trans.
Best plate (Baldwin) W. P. Ottley, Phelps, Silver Medal
Second do., J. M. Mattison, (King) Thomas
Grapes—Best sample (Isabella) R. P. Wiles, Albany, Silver Medal.

FIELD CROPS.

Spring Wheat—Solomon Walrath, Canton, St. Lawrence Co., the quantity land not sufficient—crop at rate of 40 bu. per acre.
1. Barley—Norman Gowdy, Lowville, 50 bushels, $15
1. Rye—C. L. Kiersted, Kingston, 44 bushels, 15
1. Oats do. do. 115 bushels, 15
1. Corn do. do. 99½ bushels, 15
2. B S. Carpenter, Baldwin, 80 bushels, 10
Peas—Ira R. Peck, East Bloomfield, 1st do. 8
Beans—S. Walrath, Canton, St. Lawrence Co., Medal.
1. Potatoes—Levi Hanford & Hiram Olmstead, Walton, Delaware Co., 1 6-160 acre, 233 bu., $8
1. Ruta Bagas—Levi Hanford & Hiram Olmstead, Vol. Trans.
1. Mangold Wurzel—Thos Messenger, East Neck, $8

Hon. A. B. Dickinson, Hornby, exhibited a new Draining Plow which attracted much attention, and was fully explained as to its operation by Mr. Dickinson. It promises in stiff clay soil, to reduce very materially the cost of drainage, and is within the means of every farmer.

Thursday evening the Society listened to a valuable and instructive address from Chancellor MCCOUN, the retiring President, who then introduced Hon. A. B. CONGER, the incumbent for the coming year. Mr. C. made a few pertinent remarks, after which, the thanks of the meeting having been voted to both gentlemen for their addresses, and to the former for his services during the year that thus came to its conclusion, a similar resolution was passed expressive of the general appreciation of Col. JOHNSON'S performance of the duties of his office, and an adjournment without day was had—bringing to its close one of the most harmonious and pleasant reunions of the kind, at which we have ever been present, and a fuller report of the proceedings at which, we much regret that our space at present will not permit us to give.

Sugar and Molasses from the Sorgho.

I this year planted thirty-eight rods of ground to Chinese Sugar Cane, and from that I made thirty-eight and a half gallons of molasses. There is sugar on the bottom of the cans; and from about five quarts of molasses that had stood in a pail for some time, I got seven pounds twelve ounces sugar after draining off the molasses. The molasses weighs eleven pounds nine ounces to the gallon, and the flavor is equal to the best sugar house syrup. Do you know of any of the African Imphee being raised? If so, with what success, and where can the genuine seed be obtained, and at what price. I find, in working up the sugar cane, there is a vast difference in the stalk and also in the quality of the molasses. I have a mill made after the pattern of R. Peters, of Georgia, that cost $50, that works admirably. S. H. COWLES. *Norfolk, Ct.*

Preparation of Food for Plants.

I am rejoiced to see the attention of the farming community frequently called of late to the application of manure. That the land requires feeding as much as the body, has become a settled principle with thinking and observing men. How the food of the soil shall be cooked and fed out, is not so well settled. We all know that some housewives will make a barrel of flour, and a quarter of beef, go much farther to the nutriment of the family, than others less skilled. My mother (there is no cook like a mother,) selected with her own eye, a nice sirloin piece of beef, which was served up the first day as roast; the next day a few smooth cuts were put on the gridiron, and made a dinner fit for the king; the third day the smaller pieces were made into a *chicken* pie, and the fourth day the bones furnished a delicious and nutritious soup. Now-a-days, with Biddy for kitchen manager, a similar piece of beef makes one dinner for the family, and the balance goes to the dogs or hogs. Now does not the analogy hold good between food for the body and food for the soil? Is there not a vast amount of the latter wasted for want of proper preparation and application?

All stomachs do not require the same kind nor the same amount of food A wood-chopper, breathing rapidly in the open cold air of the forest, can eat pork, and it will do him good, while the sedentary student should avoid pork with the abhorrence of a Jew. With like discrimination should manure be applied to the land. The cold clay soil, will luxuriate with the warm horse manure, while a dry sandy soil with the same application, would be rendered parched and feverish, and half the virtue of the manure would vanish into thin air.

One word as to the preparation of manure. A little leaven put into the dough, converts the starch into sugar, and sweetens and renders palatable the whole mass. The leaven is a plant which, in its proper soil of dough, multiplies itself rapidly and indefinitely. Thus with manure; put it into a pile of muck or other vegetable matter, and the whole mass undergoes a fermentation, fitting it for the food of plants. I speak of that I know, and testify of that I have seen. I have seen one load of manure convert two loads of muck into as good pabulum for plants, as the most dainty subjects of the vegetable kingdom can demand. To be sure, the compost heap requires some skill and labor. So does the preparation of bread. The flour, milk, and yeast, require composting and kneading in right proportions, and with the requisite amount of heat. Very analagous in its preparation, is the compost heap. Would that our farmers would give the subject the attention it demands, and it requires no prophet's eye to see two blades of grass growing where one grew before. BERKSHIRE.

Origin of the Cast-Iron Plow.

EDITORS OF "THE COUNTRY GENTLEMAN"—If your correspondent "G. L of Stockport," will refer to the "Transactions of the Society instituted in the State of New-York, for the promotion of Agriculture, Arts, and Manufactures," published by joint resolution of the Senate and Assembly in 1794, he will find at page 6, part 2, the following entry, which may throw some light on the origin of cast iron plows:

"Col. John Smith produced the model of a plow-share, according to which it was proposed to have that utensil made of *cast iron*, in order to save expense in husbandry, and come cheaper to farmers than those in common use, forged from *wrought iron*; and Mr. Smith and Judge Hobart were appointed to get several cast for trial."

At a subsequent page, 168, of the same volume, will be found Mr. Smith's report on the use of the newly projected share, in which he states that he "found it to exceed his most sanguine expectations," and informs the Society that they may be procured from Mr. Peter Curtenius in New-York.

This was undoubtedly the origin of the cast-iron plow. The transition from the cast share to the cast mould-board and other parts of the plow, was a natural and easy one. Subsequent inventors readily adopted the idea, and improved upon it, till at last have been produced the beautiful and perfect implements now universally used.

Col JOHN SMITH, named in the above extract, was the late Gen. Smith of St. George's Manor, in the county of Suffolk, himself an eminent and extensive agriculturist, and one of the original corporators of the old Agricultural Society of New-York. He for many years represented this State in the Senate of the United States at Washington, and died at his residence on Long Island in June, 1816. A SUBSCRIBER. *South Haven, N. Y.*

Western Apples—Budding.

MESSRS. EDS.—What fall apples would you recommend for cultivation in South Illinois, for *drying*, taking into consideration the *size* and *shape* of the fruit for peeling as well as other good qualities?(1.)

Can the operation of budding the pear on quince, be performed as easily by the amateur, as peach budding, or does it require more skill?(2.)

When should the buds be saved, and *how*, for budding the peach early in the season?(3.)

What kind of stocks are used in propapating the Orange quince by grafting?(4) A BABCOCK. *Union Co., Ill.*

(1) Keswick, Codlin, Duchess of Oldenburgh, Maidens' Blush, Sops of Wine, Fall Wine, Fall Orange, Fallawater.

(2) Budding the pear on quince requires but little more care and no more skill than to bud the peach. The pear bud must be inserted as late as practicable, so that it may not start the same summer; but if deferred a little too long the bark will not separate freely from the stock, and the operation prove a failure. To make good trees, the quince stocks should be budded nearly even with the surface of the ground.

(3) If our correspondent refers to spring budding, the shoots should be cut as grafts usually are, and kept dormant in an ice-house till the peach stocks are in leaf.

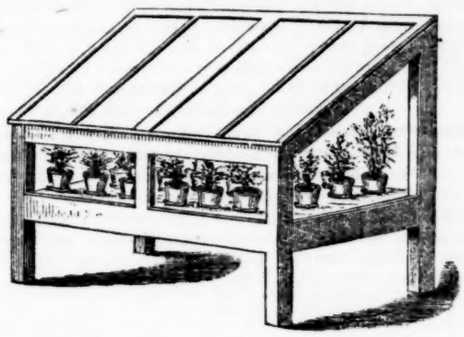
(4) One of the best modes of propagating the Orange quince is by layers or stools—cuttings often succeed—they do well on the Angers or upright quince—and sometimes on the apple root as root grafts, but the latter is uncertain.

Remedy for a Breach or Burst.

I notice on page 33, vol. 13, that R. N. of Randolph, Vt., inquires how to cure a *breach* or *burst* in a yearling colt. This will probably reach him too late to be of any service, yet it may be of service to some one. I will give you the experience of a friend, who had a colt in the same situation. He began by dieting the animal, and feeding concentrated food; then putting a surcingle around the horse, so that it would cover the breach, and placing under the surcingle and over the breach, a bunch of cloth, he drew it as tight as he could, and kept drawing it tighter every day. It soon returned to its place, and the breach healed up with no damage to the animal. This ought to be done when the breach is fresh. The animal ought to be kept gaunted for some time. W. *of Alleghany Co., N. Y.*

The Parlor Plant-Case.

Under the title of Waltonian Case, we have introduced from England a veryneat arrangement for the propagation and growth of plants in the parlor, by a lady amateur. An improvement, it appears, has been made on the original invention, by Mr. DANIELS of Philadelphia, who advertises the case for sale. It is our object now, merely to call attention to this method, and to give our opinion in favor of it, as a very neat and portable parlor propagating pit or bed, as well as a pretty plant-case. It is heated by a lamp of burning oil or fluid, which heats a pan or boiler of water secreted under the movable bottom of the case. As we are limited to space, we shall leave it to the manufacturer to detail the method of its construction, as well as the cost and other particulars. A representation of the case as it stands, is annexed. It was invented



by a Mr. Walton, as its name implies, and will prove a great desideratum to many. Should any farther information be desired, we shall be pleased to furnish it. The case may be constructed of any size from two feet wide in front, to three or six. A two-feet front case, should be about one foot from back to front, and about two feet in height to the bottom of the case, with an angle of 45° for the sash. The squares of glass are not secured, but fitted so as to slide, in order to admit air. The heating apparatus is very neat and clean in its operation.

The Apple-Pie Water Melon.

MESSRS. EDITORS—As Japan is at present attracting great attention from the people of this country, and we are, no doubt, to acquire from her many new and valuable trees, plants, fruits, and seeds, it may be of some interest to the readers of the Co. Gent., to see an account of one of her fruits already introduced to this country, by Commodore Perry in his expedition to her shores. I refer to the Japan Apple-Pie melon, which has already become somewhat famous, and bids fair to become very popular. As its name indicates, it is a melon whose chief value consists in its excellence for pies; and I would say, speaking from experience, that it makes very good pies, and is a very good substitute for apples for that purpose. In color, this melon is light green, oblong, and resembles the Orange Watermelon very much. The flesh is perfectly white, and very solid throughout, but cooks very easily, and when cooked, cannot be distinguished by its looks from green apples. It makes as good a preserve as a citron—some say better—and most excellent pickles, prepared with spices, &c., as "sweet pickles" usually are. Its chief excellence, however, lies in its adaptability for making pies; and all those that have had an opportunity to judge, as far as I know, pronounce it worthy of much praise for that purpose. Its keeping qualities are good, melons having been kept as late as March. I kept two in my cellar with no trouble, until Jan. 15th, at which time we wished to use them. The same culture that will cause watermelons to thrive, will cause this to do likewise. The sizes they grow to are from 25 to 50 lbs. The seeds are a greenish drab, size of watermelon seeds. The vines look somewhat like the latter, but are covered with short white fuz-like hairs, and when handled, emit a disagreeable odor. The melons that I grew this year, were awarded by the Oneida Co. Ag. Society, their first premium, in competition with citrons. J. H. HOPKINS.

Plain Cake.

Break two eggs into a cup; fill it up with cream; one cup of sugar, two of flour, a heaping teaspoon of cream of tartar, an even one of saleratus. MELLIE.

Contributions to Bee Culture.

RAISING OF QUEEN BEES.—To breed "in and in" always leads to injurious consequences, in bees as well as in animals. It is well known that with bees, the young queen, who is to become the mother of a numerous progeny, leaves the hive five or six days after swarming, to pair with a drone. It is generally believed that this pairing takes place in the air; however, it has never yet been ascertained, whether the queen pairs with a drone out of her own hive, or with one out of a strange hive. Most of the apiarians, who have directed their attention to the subject, have come to the conclusion, that the queen only pairs with a drone out of her own hive when she cannot possibly meet with a strange one—the near relationship is repulsive to her. Has the queen been impregnated by a drone out of her own hive, (namely, her brother,) then the female of such a mother is less fruitful than if she had paired with a drone not so closely related; for only seldom will a swarm be thrown out of such a hive. Moreover, the workers are generally lazy, unconcerned about the prosperity of the hive, commence their work late in the morning, and are inclined to rob and carry in but little honey. If the season is unfavorable they suffer, and often starve. Now this is the reason why so many apiarians lose all their swarms—the relationship is too near! Such a loss will, however, not take place, provided there is an apiary not far off, to enable the queen to cohabit with a strange drone. If this will be the case, then the subsequent queen will be strong and healthy, and communicate to her numerous progeny the same quality. We are well aware that whenever a new species of bees are brought into a neighborhood, they will invariably mix with others, and that they cannot be kept pure, unless all hives are removed to a distance of from six to nine miles. These facts are important, connected with science, but have a much more important bearing in connection with practical bee culture. They teach the bee-keeper the necessity to obtain from time to time swarms of bees from a distance, to prevent "in and in" breeding, and in case he wishes to introduce a foreign species or race, to remove his domestic bees to a certain distance, in order to preserve their purity.

The above statements remind me of a subject which has occupied my thoughts for some time—namely, *the improvement of the race*—a subject which I consider important and *feasible*. Of course this improvement would depend upon the selection of the individual through whom you wish to propagate. It is true, the selection of a male in this case, would be difficult, if not impossible; but the selection of a female would be very easy. Old mothers should be avoided, and strong, healthy and young queens selected. In this way, I think, the race of bees could be improved. W. J. E.

Failure of Western Fruit Trees.

LEWIS ELLSWORTH, one of the most successful and intelligent fruit growers in Illinois, says in a communication to the Prairie Farmer, that the loss in fruit trees in that state within the last three years, is *millions of dollars*—that it is attributed to the cold winters and dry summers. But he asserts that to a great extent this result has arisen from their standing *unprotected* in a soil underlaid with a retentive clayey-loam subsoil, which characterizes most of the prairie lands. He has adopted the practice of ridging his land, by repeated plowings, commencing at the same ridges and ending at the same dead furrows, and where nursery trees were formerly thrown out by freezing, since ridging they stand throughout the winter without injury, and make a better growth in summer. He recommends the ridging system for all orchards, each row of trees being placed on the center of the ridge.

We have no doubt that draining would lessen the effects of severe winters on fruit trees in other regions than the west.

How to Stop Bleeding.

A correspondent of the *Ohio Farmer* says—"I have noticed various ways for stopping blood. The article you will find enclosed is as easy and *sure a remedy* as I ever saw tried. It is called punk, and is found in old trees. It can be obtained by splitting the wood that has it in, and peal it off with with the fingers. It has to be rubbed up with the hand, and applied to the wound without any other preparation. It will stick itself to the wound, and stop the blood immediately, and without pain or irritation."

Culture of the Chinese Sugar Cane.

EDITORS COUNTRY GENTLEMAN—The great value of the Chinese Sugar Cane is now almost universally acknowledged, especially is this so in the west. That which is really good will prove itself to be so; if it were not so, this invaluable plant would have stood a poor chance in the face of so much ridicule as has been heaped upon it. Even wise editors, catching the popular cry, had to warn the people against "another probable humbug." By the way, our farmers need less to be guarded against unwise experiments than to be urged to the trial of new ones. They are too *much* afraid of "humbugs," including in that term agricultural papers, and lose ten times as much as they could in failures by trials of new seeds, plants, and new methods of culture. But my design is not to discuss this point, but to give some items in regard to the Sorghum that may be of use to those interested, premising that I have nothing especially new to offer.

All agree that it is important to have it fully ripened. To attain this it is of course necessary to plant early, and it can be planted as early as corn. It should be cultivated well during its first growth, but when well started it should be let alone—it will take care of itself, and ripen the earlier. To this end it should, also, be planted on high and not rich ground. The best quality of syrup has always been produced, according to my observation, on poor sandy soil, and the poorest on rich and wet soils. Nor is the quantity of syrup from these poor soils so much less as might be supposed, than from the richer soils, although the quantity of stalks may be much larger from the latter.

The cane may become over ripe, as in my own instance the past season. My cane was in best condition from September 20, to 1st October. On cutting from same October 11th, found an evident loss in amount of juice, and the saccharometer only marked six and a half degrees, a loss of 50 per cent. The syrup from this cutting was the best I have made.

I found no advantage in stripping off its leaves for a week or two before cutting. No difference in quantity or quality of juice was perceptible between that stripped or unstripped.

A very important thing to be guarded against, is its being planted near enough to broom corn or other varieties with which it can mix. This has been repeated again and again, yet already much evil has been done through inattention to this point. I have made a lot that yielded less than half an average amount in consequence. It is liable to mix at a quarter of a mile distance.

Now as to cost of raising and profits: I find, when planted in hills as corn, and cultivated in like manner, that it will produce 200 gallons per acre. An acre of corn can be raised for $4 00—to this add $2 00 for an additional hoeing. The seed and fodder will pay for stripping, cutting and hauling to mill Having made some 1500 gallons the past season, under great disadvantages, hiring the work all done at high prices, I found it cost me only ten cents per gallon for manufacturing. So we have as cost of molasses—three cents for cane and ten cents for manufacturing—in all thirteen cents. Look at this:

Dr.	*One Acre.*	*Cr.*	
Cultivating,.....	$6 00	200 gallons at 40c.,..	$80.00
Manufac'g. 200 gall,.	20.00	Expenses, ...	28.60
5 bbls. 40c.,.....	2.00		
	$28.00	Profit on one acre, ..	$52.00

Now let me make another calculation. Instead of planting in hills as corn, let it be planted in drills and well cultivated. In this way I am satisfied that 300 gallons may be had from an acre. Say that the additional labor bestowed on this will make it cost $9 00 per acre. Now I am certain that by manufacturing on a larger scale than I have done, getting it done at fair wages for hands, horses, or better still, steam, it can be made for two-thirds of above cost, say seven cents, making in all ten cents:

300 gall. at 10c. will be	$30.00	300 gall. at 40c.,.....	$120.00
7 bbls.,.....	7.00	Expenses,.....	37.00
	$37.00	Balance.....	$83.00

But even at low price of twenty-five cents per gallon, it will leave a profit of $33 00 F. *Vigo Co., Ind.*

Simple and Cheap Stump Machine.

MESSRS. EDITORS—I send you this description of a Stump Machine, thinking that if you see fit to publish it, it may be of use to some of your subscribers. It is very simple and any farmer can make it.

First, take a piece of oak, well seasoned, and reduce it in size to the width of his cart tongue, and from 4 to 5½ inches in thickness; then go to the blacksmith and get some iron straps made—also get two straps with hooks on them. Next, fasten the timber to the tongue and put on the straps (the ones with the hooks) at each end, with the hooks down. All being ready, take a tackle and some chains, yoke up your oxen, and go to your stumps. This timber should be made so as to be taken off again, and should be made so as to yoke your oxen on to it.

First pass a chain around a root of a stump; then raise the tongue, which can be done either by hand or a small "pair of shears," as you would to load a log, and hook on the chain. Fasten the lower block of the tackle to a stump or something else; hook on your oxen and drive off, and if your stump don't come out, it is different from mine.

It is no more trouble to raise the tongue by hand, than where you pull the stumps by shears, than it is to raise them, and I don't think it is as hard work.

I have never seen anything like it, and all that have ever seen it say the same.

The great trouble with such machines, is that they are very complicated and costly, which is not the case with this, for the actual cost cannot be over ten dollars, except for the wheels, which every farmer is supposed to have, and the power that it will exert is very great, more so than you would think at first, as you will see.

Let us suppose the stick or lever to be 18 feet long the long way, and two feet the short way. Then the force of one pound on the rope, supposing the tackle to have four ropes, would exert the force of thirty-six on the stump, and if the oxen could pull one ton or two thousand two hundred and forty pounds, they could raise eighty thousand six hundred and forty pounds or thirty-five tons, two hundred and twenty-four pounds; force enough to rend the stump to fragments. If more force is required, you could lengthen one side of the lever and shorten the other—thus call the lever nineteen feet and one foot, you would then have a force of over seventy-five tons. H. *Richmond, Me.*

PENN. STATE AG. SOCIETY.—The annual meeting of this Society was held at Harrisburg Jan. 18th, when DAVID TAGGART of Northumberland county was elected President, with 25 Vice-Presidents—A. Boyd Hamilton, Sec'ry—Prof. S. S. Haldeman, Chemist and Geologist, and Henry Gilbert, Librarian.

NEW-JERSEY STATE AG. SOCIETY.—At the annual meeting at Trenton, Jan. 18, the following officers were elected:

President—GOV. WM. A. NEWELL.

Vice-Presidents—1st District, Jeptha Abbott; 2d, N. S. Rue; 3d, A. V. Bonnell, 4th, Henry Hilliard; 5th, Lowell Mason, Jr.

Secretary—Wm. M. Force.

Treasurer—C. M. Saxton.

☞ At the annual meeting of the BAINBRIDGE AGRICULTURAL SOCIETY, held Jan. 15, 1859, the following officers were elected for the ensuing year:

President—IRA HYDE.

Vice-Presidents—Oliver Somers, J. B Sands, Robert Pearsall, A. N. Humphrey, Ira Bennett, and Tyler Johnson.

Secretary and Treasurer—Jos. Juliand 2d.

Managers—John Banks, Charles Bixby, Nelson Ireland, Walter Higley, John Sanders, and Daniel Bristol.

Share's Harrow, Pulverizer, &c.

MESSRS. L. TUCKER & SON—As many of your readers doubtless consider, as I do, that every machine which has for its object, and *really* is a saving of time, labor and expense, is of vital importance to them, I will state my experience in the use of D. W. Share's patent Potato-Covering, Hoeing, Cultivating and Hilling Machines, and also his Coulter Harrow and Sod-Pulverizer, and Grain Coverer.

I first saw these machines in May last, when one of Mr. Share's agents came to my place with them, and requested me to try them. I did so, and after a short trial, I was so well satisfied with the manner in which they worked, that I purchased a set of them, as did some twenty or twenty-five of my neighbors. I used them in working my corn and potato crops, with very little hand-labor, part of my land being stumpy. Many of my neighbors worked their crops exclusively with them, to their entire satisfaction.

The Coulter Harrow is decidedly the best machine for pulverizing land and covering grain, that I ever saw. I got one of them in the latter part of June, after my land had been prepared for spring crops, and had but little opportunity for trying it until preparing my land for buckwheat. This land had been plowed about the first of May when it was wet, and at the time I used the Harrow upon it, was very hard, and its operation satisfied me that no other Harrow or Cultivator could have done the work so well or so easily. Instead of cross plowing my summer fallow, as I generally do, I pulverized the soil to the depth of from five to seven inches with this Harrow, and after sowing my grain broadcast, I covered it with the same machine. The appearance of my crop last fall, satisfied me that the use of the Coulter Harrow had added much to its growth, as the old sod had been left where it should be, to nourish the roots of grain. JOHN MCHARG. *Bethlehem.*

Hen Manure for Indian Corn.

MESSRS. EDITORS—In an article in the Country Gentleman of the 30th of December, headed "Reader, will you write for us?" you furnish a list of subjects on Indian corn, fourteen in number, on each of which you invite your readers to give their experience. I think this idea of furnishing subjects a happy one, and on each of these connected with Indian corn, which, in this section of the country, has now become the most important and reliable crop, many farmers ought to have some experience to communicate, which might be interesting to your readers. I agree with you that each subject is enough for a single communication; I will therefore confine myself to giving my experience on No. 5 On cleaning out my hen-house last spring I had more than a wagon load of clear hen manure. I drew this into my barn intending to drop it on the hills of corn as soon as the corn made its appearance. I planted one acre on the first of May, but after that the weather was so unfavorable that it was the end of May and beginning of June before I got through planting. Long before this the manure began to heat at such a rate that I had to unload it on to the barn floor, and on going into the barn in a few days after, the effluvia from the escaping ammonia was so powerful that I was glad to escape from the barn. Having some plaster on hand I mixed it thoroughly with the manure, spreading the latter thinly over the floor and bruising and chopping it very fine. It was then thrown into a heap and remained on the floor until the corn was ready for it, and there was no further preceptible escape of ammonia. With this I top dressed all my corn, eleven acres, and had a barrel left over for other purposes. So well satisfied am I with the result that for the future I intend to prepare my hen manure in the same way and apply it to the same crop. I mixed enough plaster with it to make it dry and quite inoffensive to handle. I can speak of this from experience, as I dropped it over four acres myself. Now here is a manure equal in value, I doubt not, to the average of imported guano, which every farmer can manufacture for himself, for every farmer keeps fowls. But he must have a suitable building for them, and not allow them to roost all about his premises and even in trees, wasting that valuable manure, as is too often the case So highly do I esteem this manure that I make it my business every night to see that all my fowls are within their proper house. C. B MEEK.

Cure for Scab in Sheep.

EDS OF CO. GENTLEMAN—In some of your late numbers, inquiry is made for a remedy for scab in sheep. I have had this disease break out several times among my sheep, and have never failed in effecting a cure by the application of tobacco juice. If taken in time, the cure is quite easily effected; but if allowed to spread among the flock, it is a work of considerable labor. Wash the parts affected with a pretty strong decoction of tobacco, and repeat every two or three days until the skin of the animal resumes a healthy state. It is a sure cure. An extensive farmer in this vicinity, who kept several hundred sheep, had the scab among his flock, and allowed it to be spread so extensively that many of them were covered with the eruption to the ears and eyes, and the only way that he could devise to make a speedy cure was to fill a large cask with the decoction, and immerse each sheep, merely allowing a sufficient portion of the head out for breathing.

No time should be lost; apply the remedy immediately. R M. CONKLIN. *Cold Spring Harbor, L. I.*

CATTLE SALE.—It will be seen by an advertisement in this paper, that Mr. TABER of Dutchess county, proposes to sell his fine herd of Short-Horn cattle at auction early in May. Both the bulls mentioned, were bred by Mr. Thorne, and have received prizes at various exhibitions, as have also several of the cows and heifers.

☞ The Indiana State Ag. Society are to hold their next Fair at New Albany, from Sept. 26, to Oct. 1.

RUTLAND CO. (VT.) AG. SOCIETY.—Officers selected for 1859:

President—DANIEL KIMBALL, Clarendon.
Vice-Presidents—Hon. C. S. Rumsey, Hubbardton, and Alpha H. Post, Rutland.
Secretary—Henry Clark, Poultney.
Cor. Sec.—Dr. Orel Cook, Jr., Rutland.
Treasurer—Hon. Zimri Howe, Castleton.
Auditor—Ward M. Lincoln, Brandon.

☞ At the annual meeting of the AG. SOCIETY OF MONTGOMERY COUNTY, PA., held Feb. 14, 1859, the following gentlemen were duly elected officers for the ensuing year:

President—W. B. ROBERTS.
Vice-President—Samuel Roberts.
Treasurer—D. C. Getty.
Rec. Sec.—Geo. F. Roberts.
Cor. Sec.—A. W. Corson, Plymouth Meeting P. O., Mont. Co., Pa.
Executive Committee—S. H. Stout, John Bickings, Joseph Shannon, Benj. Baker, George Gaetrell, William Michener, John Shepard, and Seth Lukens.

☞ We learn that JOS. JULIAND, 2d, of Bainbridge, has just sold the young Short-Horn bull "Mahomet," bred by him, to SPENCER F. ALLIS, Coventry, N. Y. "He is a very promising calf, and bids fair to equal his sire, "Sultan" 2270½, in form and size."

Composting Bones—Manure for Corn.

For a number of years I have had about a ton of coarse bones, and after trying various ways of applying them as manure, I settled down upon the following unscientific way of composting them:

I first soften the bones with salted ley, until they can be crushed with a wooden beetle. After they are crushed, I mix well together one part bones and three parts wood ashes, slightly damp the whole—then pile it up in a heap. The heat should be trod together very hard. After two days the heap should be mixed with ten or more times its bulk of peat or pond mud. I usually compost it in October, shovel once in November, and use to top dress my cornfield the next spring I have used it three years in succession, and it has paid the best of any manure I have ever used.

I am aware that many will condemn this way of composting bones on account of the waste of ammonia, but it seems to me that the wasted ammonia is more than compensated for in the increased value of what there is left. Bones and ashes prepared in this way, cause a pile of mud sixteen times their bulk, to heat, and the bones will nearly all crumble to powder before the next spring. I never could succeed in making bones prepared in any other way, do so. I have read with much interest several articles in the COUNTRY GENTLEMAN upon prepared bones. One article, by Mr. BARTLETT, if I recollect right, gave an account of his boiling bones once in ley. The ley he used was probably too strong; the bones should not have been heated hot enough to have boiled at all I could see by his article, that he lacked the thirty years experience that I have had in boiling bones as plainly as he will see, if you print this article, that I lack his ability to write for the COUNTRY GENTLEMAN. E. W.

Cranberries on Dry Upland.

MESSRS. EDITORS—Having seen several notices of cranberry culture in your paper, I send you a short statement of recent trials on Long-Island, which are interesting, chiefly from the fact of the successful cultivation of this valuable fruit on land perfectly high and dry.

If cranberries can be raised in any ordinary garden as herein described, it is a matter of some importance to know it.

The following letter from Mr. J. H. W., relating to this subject, tells the story. Mr. W. wishes not to have his name in the papers, but consents to the publication of the facts:

"Yours of the 27th Nov. is received. You wish to know how my cranberries turned out. I will give you a short history of my cranberry cultivation. After all the information I could get, about soil, location and profits, I obtained plants, and started an eighth of an acre two years ago last spring; and by the way the plants grew and flourished, I became satisfied it would pay, and made it up to one acre—part of it a year ago last spring, and the balance this last spring. You see by this account, that only the eighth of an acre came into bearing the past year. True, I gathered a few berries last year, but this is what cultivators call the first bearing year, and I am informed they are not in their prime until the plants are five or six years old. I know nothing about it by experience myself, but state the information I have received from others.

"Now for the facts that came under my own observation. Since I saw you, I have received account of sales, and also received the money for the product of the eighth of an acre. After all expenses paid, freight, commissions, &c., I received $14.50—at this rate an acre, the third year from planting, will pay $116.

"Now one fact must be borne in mind. I was unacquainted with the cultivation of them, and I am satisfied, to begin with, I did not get the best variety of vines; the Upland is the best I bought mine for the upland, but am convinced I did not get them. In the next place experience has taught me I did not give them proper cultivation. I am now satisfied that with the upland vines, and proper cultivation in the beginning, that the third year the yield will be full $200 per acre. J. H. W. *Dec* 6, 1858"

The details of the culture, such as the preparation of the ground, and the particular time and manner of setting out the plants, and their care, are not given in the above letter, but I am informed by Mr. W. that no manure or fertilizers of any kind were applied to the ground. The land is in the midst of the wilds of Long Island, and what has heretofore been regarded as utterly barren and worthless. The spot on which this experiment was made, is in Islip, about 48 miles from Brooklyn, and about two miles south of the L. I. R. Road, being about half way from the Rail Road to the the south shore of the Island, on land entirely high and dry, being 70 or 80 feet above tide water. The well on the place, near the Cranberry bed, is 40 feet deep. The surface of the land is level. I mention these facts, to show that it is not the kind of land on which it has been commonly supposed cranberries could be raised.

The soil is a fine warm loam, such as almost any man would, on seeing it turned up, select as being choice or the finest kind of garden land. The piece on which the cranberries are, was simply cleared of the the small roots, and the vines set out: the large stumps are yet standing in the ground.

I will also state that a neighbor of Mr. W., seeing the growth of the vines, and not feeling able to purchase plants, went on to the borders of the Connetquot river, a stream running into the Great South Bay, where the native cranberry vines are abundant, and took up a quantity from the low wet ground, and transplanted them into his garden; and I am informed that they are perfectly successful; that they have grown thriftily, bear well, and fruit of excellent quality. I am told the owner thinks these native vines taken from the borders of the stream, are better than those purchased and brought to the Island, by Mr. W.

I saw W.'s vines, in October last; they had entire possession of the ground, literally covering it—no weeds nor grass among them, and they were full of fruit. E. F. PECK. *Brooklyn, N. Y.*

Flatulent Colic in Horses.

MESSRS. EDITORS—In your issue of October 8, I notice a remedy for Flatulent Colic in Horses, very simple and no doubt very good. As the ingredients may not all of them be at hand when wanted, permit me to communicate one equally simple, and at all times accessible in almost every house in the land. This is simply to make a drink of any of the green teas of a strength compared with that for family use, proportioned by the additional size of the animal, and give it cool. Relief will speedily follow. If a teacupful of molasses is added to the tea, it may be well, but is not essestial. Keep the animal stirring until relief is very certain. We have seen it tried with entire success in many instances.

In a late instance, where the horse had refused to stand, two doses were found necessary, and in fifteen minutes after the administration of the second, the horse began to eat. The quantity of tea used was about three ounces.

For a drench to follow, molasses and lard mixed by warming, is very good. W. B.

Inquiries and Answers.

TIMBER FOR UNDER-DRAINING.—I wish to know if logs, when hewn or sawed square, or even plank nailed together in the form of a log, might not be overlaid with water-lime cement, and profitably used, instead of stone, for underpinning buildings, where stone are very scarce and timber plenty. Would the timber shrink and swell, and crack the coating so as to let in air and moisture, and rot the timber. J. M. Y. [If the whole surface of the timber were covered with a coating of the water-lime mortar, it would not adhere well, and would after a while crack off. Moisture would enter or pass off at different times, swell and contract the timber, and all would become finally exposed. Parts near the surface of the earth, would be still more affected with moisture, and freezing and thawing such portions of the mortar, would accelerate its destruction. If we were compelled to use timbers at all, we would lay them in common lime mortar in which there was a large portion of lime, which, entering the pores of the wood, would serve to preserve it. Applying lime wash to the outside of the timbers, would promote the same end—the lime wash being colored brown by ochre or earthy paint, to prevent a bad appearance from the dead whiteness of the lime.]

CHLORIDE OF LIME.—Will chloride of lime neutralize all offensive odors, if applied to vaults of privies—and if so, what does it cost? J. M. Y. [Chloride of lime tends to destroy all bad odors, especially vegetable—it is cheap, but we do not know its wholesale cost. For privies it would not answer well, without enough for changing the nature of all the contents. A much cheaper mode of destroying all the odor is to sprinkle in daily a few quarts of coal ashes, which simply absorbs all, and renders them dry and inodorous. Pulverized charcoal is still better when it can be had, and even dried peat does tolerably well.]

SALT IN THE SOIL.—Is there any manure or cheap chemical agent, that will restore the productiveness of ground rendered unproductive by becoming saturated with common salt? [Nothing so cheap nor so good as *water*, which will dissolve one-third of its weight of salt—and if there is subsoil drainage, the rains will soon wash it all out.]

CROOKED HORNS.—J. S. GRENNELL inquires how to scrape his steer's horns to make them grow in the right direction. Scrape in the opposite direction from the way you want them to grow—if to turn up, on the under side—if out, scrape the inside—if long and thrifty, give them roots or meal. H. P.

DITCHING PLOW.—*J. B. Tibbits, J. H. Eaton* and others. The ditching plow, the successful operation of which was described by us a few weeks since, answers well as a subsoil plow for ordinary purposes—we know of none to exceed it in this respect. After trying various modes, from the use of a $150 ditching machine, downwards, we find this the simplest and most economical instrument to assist in cutting drains, independently of its low cost. The last number of the Illustrated Register points out several modes for filling drains cheaply.

WALLING A SPRING.—*A. W. B* A reservoir may be built of stone about a spring, in order to raise the water, by laying the stone in water-lime mortar. The sides should be well banked up with several feet of earth, and the top also as well covered as practicable, for if the mortar freezes it will crack and leak. If the interior is always full of unfreezing water, this will be a protection to the inside wall. Unless all these requirements can be properly complied with, it would be better to lay up the stone as commonly in stoning wells, and form a thick bank of compact clay around the stones, covering the whole with sod.

GRAIN FEED FOR CATTLE, &c.—I have a stock of cattle of various ages, in as good condition as cattle will average. My hay is as good as average. How much grain per day can I feed to each creature at a profit? [We are not aware of any accurate experiments to settle this question. It is a common opinion, however, that it is not profitable to feed any quantity of grain to store cattle.] Should a cow's tail be cut off when the hair on the end twists? E. W. [No.]

ANNUAL REGISTER.—*D. M N., Lewisburg, Pa*—We can send you any or all the numbers of this work—price 25 cents each.

BEST FARM DOG.—I would say to L. F. D., page 49, that my idea of a dog for a farm, is a rough or fox Terrier—say to stand about 20 inches in hight, and to weigh 35 to 40 lbs.—if properly taught, a dog of all-work. A Newfoundland, if kept tied, will make a great noise, but if left to run, are for the most part, good scavengers, and are always under-foot when not wanted. I find the Terrier equal in all respects to any other breed, for spunk and perseverance, and for outside farmers they cannot be valued too high—have proved themselves good for the churn, and are death to all small pests. N. J.

CORN AFTER TURNIPS.—I have commenced a rotation of, first, corn; rye hoed in, in August; pasture the rye until the next July; then plow and apply a good top-dressing, and sow grass and turnip seed. A heavy crop of turnips can be harvested in November, and the grass is none the worse for the turnips that I can see. I would like to know if the crop of turnips will affect the next crop of corn if the field is in grass three years? E. W. *Kingston, Mass.* [Probably not.]

SWEET GERMAN TURNIP.—These came up finely, but were immediately attacked by a small black bug, which, in spite of all my efforts, destroyed perhaps nineteen-twentieths of them. I succeeded, however, in raising a number of bushels of most beautiful and delicious turnips. They are altogether superior in flavor to anything I ever raised in the turnip line. Can you, or any of your subscribers, tell me how to destroy the said bug? J. H. W. *Gustavus, Ohio.*

LUMP ON THE JAW OF A COW.—I would say to W. C. A., Jr., that if the wen or lump under the jaw of his Durham cow is attached to the bone, any attempt to remove or check it will be unavailing. If it is loose from the bone, an application of Iodine might probably be beneficial; but most likely the advice that Youatt gives in such cases would be the best—that is, to get the animal into the hands of the butcher as soon as possible; but whenever the lump discharges matter, the effort to improve the animal's condition is hopeless. J. COPE. *West Chester, Pa.*

EQUATION OF TIME.—What is the variation from the true time expressed in your Almanac, at this point, viz: Latitude 44° 45′ N , Longitude 91° 20′ W. A. G. M. [We do not perhaps understand our correspondent. Sun time varies from mean time differently on every day of the year, from nothing at some periods, to about 16 minutes at others; and this variation is not affected by latitude or longitude, but is the same at the same moment in all parts of the country.]

GRAFTING PLUMS, &c.—Can plums, peaches, and cherries, be grafted with success? If so, what is the best method of grafting them, and when is the best time to do the work? A. H. A. *Belmont Co., Ohio* [Plums and cherries may be grafted with success, but not peaches, although the latter sometimes succeed under peculiar circumstances. If the stocks of the plum and cherry are large, they should be cleft-grafted; if small, they may be tongue-grafted. Cherries will not succeed unless grafted very early, or even before the frost has escaped from the ground in spring; and plums do best if the work is done nearly as early.]

PEARS ON QUINCE.—Will you tell me which is best to do, graft my Angers quince this winter with pear, or bud them next summer? (1) Will the little dwarfs dare to give me fruit after being called such names? (2) What are a few of the best kinds of pears for the quince? (3.) M. [(1.) Bud them next summer. (2.) Fortunately, they have not the vanity and weakness of human beings, and disregarding all calumnies, show by their *fruits* just what they really are, without a con-

tentious word. (3.) The best sorts on quince are Louise Bonne of Jersey, Urbaniste, Angouleme, Diel, Glout Morceau, Winkfield, Beurre Superfin, &c.]

STRAWBERRIES FROM SEED.--Will you inform me when is the proper time to sow strawberry seed. J. B. S. *Anderson, S. C.* [Wash the seed well from the fresh ripe fruit, and sow immediately—the soil must be light, rich and shaded from the rays of the sun except in the morning; covering them with fine mould.]

CORN CULTIVATORS.—*M. R. D* For the labor commonly performed by cultivators, we have never found any in our own experience equal to those made by SAYRE & REMINGTON of Utica, for cheapness, strength, durability, and efficiency, combined. The teeth are made of steel, and continue sharp till quite worn-out. For performing the labor of hoeing, and covering short weeds among the corn plants, we are inclined to believe, from some practical trial, that *Wetherell's Patent Horse-Hoe*, which we described last autumn, will prove a valuable and labor-saving implement, wherever the ground is not excessively stony. It pulverizes and scatters the soil in among the young plants in an efficient manner.

CROOKED HORNS, &c.—J. S. GRENNELL may be informed that the crooked horn must be scraped on the side opposite that towards which he wishes it to incline --that is, if he wishes it to turn up, scrape (or shave) the lower side, rubbing on some oil afterwards, to facilitate the growth of the side that is scraped. CHARLES RICHARDS.

And now please inform me why my cattle rub off the hair from various parts of the head, leaving the skin, which is thus exposed, very dry and scurfy. It cannot be attributed to lice, or want of shelter, or food, or litter,—and is spreading from one to another through the herd. What is the cause? and what would be a preventive or remedy? C. R. *Bristol, Ct.*

COMPOST FOR GARDENS.—My neighbors often are benefited by your advice in THE CULTIVATOR, and I beg your aid too. My garden and farm are gravelly, and the roads are made of clay carted some distance. There is no muck to be had within five miles. What shall I use to make a compost with my manure heap? What shall I add to my hen manure to make it good for my corn and potatoes next May? It is likely many would be benefitted by your directions on these two points, as well as AN OLD SUBSCRIBER. [Clay is a very poor material for roads, and gravel the best. For light gravelly gardens, a compost is desirable that contains considerable clay. Instead therefore of carting clay to the roads, let it be used in alternate layers with manure as a compost for light soil. Loam, clay, or turf, are either of them as good as muck as a constituent for compost, so far as absorbing the volatile parts of the manure is concerned. For light soils, clay would be best, and for those of a heavier nature, turf would be better. Adding the hen manure to this heap of compost would retain all its valuable parts.]

GRAFTING-WAX—GRASS SEED.—Will you please inform me the mode for making grafting-wax, and the most proper time for spring grafting? Also, the amount of timothy and clover seed to be sown per acre, on land where the timothy will run clover nearly out, in three or four years? M. P. D. *St. Armand, C. E.* [A good and cheap grafting-wax is made by melting together and mixing well, 4 lbs. rosin, 2 lbs. tallow, 1 lb. beeswax. These three ingredients are used in various proportions by different propagators—sometimes in equal quantities - sometimes 8 parts rosin, and 3 each of tallow and beeswax—or 8 parts rosin, 5 of beeswax, 3 of tallow, &c. By using lard instead of tallow, as it is softer, more rosin may be employed. A mixture of equal parts of clover and timothy, at the rate of a peck or more per acre, will furnish a good seeding.]

SORGHUM MILLS.--A correspondent desires information as to which is the best mill for pressing the Sorghum. Any reliable information on the subject, will be interesting to many of our readers.

NANSEMOND SWEET POTATO SEEDS AND PLANTS.—Seed $5 per barrel. Plants, at proper season, $2 per 1000—$1.50 when 10,000 or more are taken—packed so as to go to all points in the North where Expresses will carry. For information relative to propgating, planting, &c., and statements from those who had our plants the past season, address, with stamp, O. S. MURRAY & SON,
Mar1—m1w5t Twenty-Mile Stand, Warren Co., Ohio.

VALUABLE STOCK HORSES FOR SALE.—The subscriber offers for sale, two fine Black-Hawk Stallions, both sired by old Black-Hawk, and from superior mares. One weighs 1,000 and the other 1,200 lbs.; both black without marks. They are five and six years old, kind and gentle; have proved excellent stock-getters. I have also a promising two-year-old Stallion of the Black-Hawk stock, and a Morgan of the same age. Also several Fillies of from one to four years old. Will sell any of the above-named at low prices. Address
JNO. JACKSON,
Mar. 1—w3m1t Brandon, Vt.

SHORT-HORN HERD AT AUCTION. Having sold my farm at Chestnut Ridge, Dutchess county, N. Y., I will offer for sale at auction, my entire Herd of Short Horned Cattle, consisting of about 35 head superior animals. Among them will be the unrivalled Bull "*Highflyer*," 578; also, stock sired by him, as well as the "*Earl of Warwick*," 465. The sale will take place at Dover Plains, on the New-York and Harlem Rail Road, on the 10th day of May next, at 12 o'clock.

Catalogues of Pedigrees may be had after the 10th day of March, at the offices of the *American Agriculturist*, New-York; *Country Gentleman*, Albany; *Ohio Farmer*, Cleveland; *Boston Cultivator*, and of the subscriber,
SAMUEL T. TABER,
Mineola, Queens Co., N. Y.

P. S. No animals will be disposed of before the sale at auction. Feb. 24—w10tm2t

SEEDS!—SEEDS!!—SEEDS!!! The subscriber has now in store, his entirely new stock of GARDEN, FIELD and FLOWER SEEDS. The very superior quality of the following, is particularly recommended, all of which are required early:

Broad Windsor, Mazagan, Long Pod, and Nonpareil Beans, each per quart,	20	cts.
Extra Early and Blood Turnip Beet, each per oz.,	10	"
Early Purple and White Brocoli, each "	30	"
Early Winingstadt, London, and Ox-Heart Cabbage, each per ounce,	20	"
Early White and Giant Solid Celery, each per oz.,	20	"
Ex. Early Forcing and Early Horn Carrot, "	10	"
Ex. Early Paris and Thorburn's Nonpareil Cauliflower, each per ounce,	80	"
Early Frame Cucumbers per ounce,	10	"
Improved New-York Purple Egg Plant, "	80	"
Early White Vienna and Large White Kohl Rabi, per ounce,	20	"
Silesia, India Head, Butter, and Simpson's Improved Lettuce, per ounce,	20	"
Extra Double Curled Parsley, per ounce,	10	"
Extra Early Daniel O'Rourke Peas, per quart,	30	"
" Sangster's No. 1 Peas, "	30	"
" Canada Peas, "	25	"
" Tom Thumb Peas, "	75	"
Fairbeard's Champion of England Peas, "	30	"
Napoleon and Eugenie Peas, each "	50	"
Epp's Monarch & Lord Raglan Peas, each "	75	"
Harrison's Glory and Perfection Peas, each "	40	"
Cherry, Cayenne, Bell and Squash Pepper, 20 oz.,	40	"
Early White and Scarlet Cherry Radish, each "	10	"
London Particular Long Scarlet " "	10	"
Christina Musk Melon, (true,) per ounce,	40	"
Round Savoy Spinage, per pound,	60	"
Early Red Smooth and Large Red Tomato each per ounce,	25	"
Early Garden Stone Turnip per ounce,	10	"
The Celebrated Hubbard Squash, per ounce,	20	"
Twenty-five varieties of choice Flower Seeds for	1.00	

With a large and choice selection of seeds generally, for which referrence is made to my Retail Catalogue just published, which will be mailed to address, enclosing a one cent stamp.

For sale, 100,000 choice plants of the celebrated WILSON'S ALBANY SEEDLING STRAWBERRY. Price $2.00 per 100—7.50 for 500—$10.00 per 1000, including packing. WILLIAM THORBURN,
Albany Seed Store,
March 1—w3tm1t 492 Broadway, Albany, N. Y.

PRINCE ALBERT POTATOES.—The subscriber has completed arrangements, and offers for sale the above valuable potato, which can be relied upon as the GENUINE ARTICLE. Price $2 per bushel—$5 per barrel (of nearly 3 bushels.) Ready for delivery about 1st April. WILLIAM THORBURN,
Feb. 24—w3tm1t 492 Broadway, Albany, N. Y.

D. L. HALSEY, DEALER IN *CRANBERRY PLANTS*,
Victory, Cayuga County, N. Y.
☞ PRICE—$1 per Hundred—$6 per Thousand.
Feb. 24—weow6tm2t

NEISHWITZ' MOWER AND REAPER.
Buckeye Mower and Reaper.
For sale by A. LONGETT,
Mar. 1—m3t | ap. 7—w4t 34 Cliff-st., New-York.

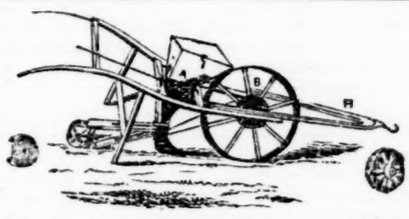
ELLWANGER & BARRY'S old established "*Mt. Hope Nurseries*," Rochester, N. Y. Orders received at *Agricultural Depot*, 100 Murray-st., New-York.
Mar.1—m1w2t | ap1—m1w2t HENRY F. DIBBLEE.

BAKER APPLE GRAFTS by Mail, post-paid—30 cents per doz. Send stamps.
F. A. ROCKWELL,
Mar. 1—w4tm1t Ridgefield, Conn.

MAPES' NITROGENIZED SUPERPHOSphate of Lime—also first quality of Peruvian Guano, for sale at *Agricultural Depot*, 100 Murray-st., New-York.
Mar.1—m1w2t | ap1—m1w2t HENRY F. DIBBLEE.

WILSON'S ALBANY SEEDLING.
The Best and most Prolific Market Strawberry! Yields 150 to 200 Bushels per Acre! Genuine Plants of this superior variety for sale, in large or small quantities. Price, $10 a thousand—$1.50 a hundred, or $1 for fifty.
Red Antwerp Raspberry canes, $4 per 100—$2.50 for 50, or 16 for $1.
New-Rochelle (or Lawton) Blackberry canes, $10 for 100—$6 for 50—$3 for 24—$2 per dozen
All plants ordered, securely boxed and delivered in Albany, without extra charge.
Orders accompanied by cash promptly attended to.
WM. RICHARDSON,
Mar. 1—m1t 96 South Pearl street, Albany, N. Y.

FOR SALE.—100 BARRELS PURE,
PRINCE ALBERT POTATOES.
50 bushels Rough Purple Chili Potatoes.
50 bushels Peach Blow Potatoes.
10 bushels New-Hartford Potatoes.
10 bushels Garnet Chili Potatoes.
Warranted Genuine, and have never been known to rot in any soil. Price $5 per barrel or $2 per bushel.
F. W. NOBLE,
Mar 1—m3t Easton, Pa.



ALBANY SEED PLANTER
AND DRILL BARROW,
Manufactured by Pease & Eggleston, Albany, N. Y.
Directions for Use accompany each Machine.

The above cut represents the latest and most approved Seed Planter now in use; as seen in the cut, it can be used with or without a horse. Its capacities are as follows: 1st. For planting in *hills*, it admits of twenty-four variations in distance between the hills; the smallest being three inches apart, and the largest eight feet apart. 2d. The number of seeds to the hill can be varied from one to any required number. 3d. For drilling, it admits of twenty-four variations, thus adapting it to every description of small seeds. 4th. It will plant any required quantity of carrot, onion, and other small seeds per acre, from ¼th to 10 pounds. Price $14. Feb. 10—w4tm1t

NOTICE OF PARTNERSHIP.—The undersigned have this day formed a Limited Partnership for the period of five years from the 27th day of January, 1859, under the name or firm of HENRY F. DIBBLEE, for the purpose of dealing in or manufacturing *Agricultural Implements, Machines, &c.—also sales on commission*. Henry F. Dibblee is the General Partner, and Charles A. Griffin, who is the Special Partner, has contributed Eight Thousand Five Hundred Dollars in cash. Dated New-York, January 27, 1859.
(Signed) HENRY F. DIBBLEE,
CHARLES A. GRIFFIN.
The business will, as heretofore, be conducted at *Agricultural Depot*, 100 *Murray-st., New-York*, where an increased variety of *Implements, Machines, Seeds, Fertilizers, &c.*, will be found. March 1—m1t | mar 2—w1t

PERUVIAN GUANO.—No. 1 Peruvian Guano, Government Brand and Weight, direct from the Peruvian Agents, at the lowest market price, in quantities to suit purchasers. Send for a Circular. A. LONGETT,
Mar 1—w&m3ms 34 Cliff-st., New-York.

ELLIOT'S WESTERN FRUIT BOOK.
A new edition of this work, thoroughly revised, embracing all the new and valuable Fruits, with the latest improvements in their cultivation, up to January, 1859, especially adapted to the wants of *Western Fruit-Growers*, full of excellent Illustrations, by
F. R. ELLIOTT, Pomologist,
Late of Cleveland, O., now of St. Louis. Price $1.25. Sent by mail, post-paid, to any part of the United States, on receipt of price. A. O. MOORE & CO.,
Ag. Book Publishers,
Feb. 24—w2tm1t 140 Fulton-st., New-York.

MAPES' CELEBRATED ONE-HORSE Steel Subsoil Plow, for deep cultivation of crops during their growth. Also the same pattern, *three larger sizes*, for deep subsoil plowing. For sale at Agricultural Depot, 100 Murray-st., New-York.
Mar.1—m1w2t | ap1—m1w2t HENRY F. DIBBLEE.

COMMERCIAL AGENTS WANTED. Able and honest men from New-England or New-York. A. W. HARRISON, Philadelphia, Pa. feb.10-6*

AMERICAN WEEDS AND USEFUL PLANTS,
OR AGRICULTURAL BOTANY,
By W. DARLINGTON, M D., West Chester, Pa., with additions by GEORGE THURBER, New-York. A History and Description of all plants injurious or important to the American Farmer and Gardener; with nearly *Three Hundred Illustrations*.
The Weeds which now infest our farms, have, with few exceptions, been introduced from abroad; and being at first unnoticed, have spread from farm to farm, until it now costs the Farmers of America, *millions of dollars every year*, for the destruction of these foreigners, or in the injury done to their crops. Every Farmer should guard his grounds from the *first approach* of his enemies.
As a class-book for Agricultural Schools and Colleges—and a Hand-book for the Farmer, and for all public and private libraries, this book is the most valuable addition yet made to our already large list of Agricultural Books.
Price $1.50. Sent by mail, postage paid, on receipt of price. A. O. MOORE & CO.,
Ag. Book Publishers,
Feb. 24—w2tm1t 140 Fulton-st., New-York.

COLEMAN'S FARM MILL,
Cornstalk Cutter and Grinder—(Hickok's Patent.)
GRIFFING BROTHER & CO.,
60 Cortlandt-st., New-York City.
Farmers sending us their address will receive our *Illustrated Catalogue and Almanac* for 1859. Dec. 9—w&m3m

NO. 1 PERUVIAN GUANO,
"Hoyt's" Superphosphate of Lime,
Bone Dust, Plaster,
Poudrette, Tafeu, &c.
The above Fertilizers *warranted* pure, and sold at the lowest market price.
GRIFFING BROTHER & CO.,
Feb. 10—w&m3ms 60 Cortlandt-st., N. Y. City.

Notes for the Month.

DAVIS' SEEDLING POTATO.—We are indebted to J. S. GRENNELL, Esq., Secretary of the Franklin Co. Ag. Society, Greenfield, Mass., for a barrel of these celebrated potatoes, which we regret to say, were so badly frozen on the way to us, as to prevent our judging of their quality. Mr. G. says—"The Davis Seedling originated in the eastern part of Massachusetts, about five years ago, and is now the most popular potato in the State; and considering its great yield, its uniform size, entire freedom from rot, and its dry mealy character when cooked, is at present the best potato in the United States."

FARMING IN VERMONT.—We are inclined to think that there is no State in the Union where the labors of the farmer are better paid than in Vermont. Though emphatically a mountain State, her valleys are traversed by railroads, by which a ready market is provided, with but little cartage, in almost, if not quite, every county of the State. In horses and sheep, she does a large business with the Southern and Western States, while her grain crops, her dairy products for which she is celebrated, and her fine beef, pork and mutton, are unsurpassed in the Boston market. In the Co. Gent. of Jan. 13, we gave a statement of the shipment of butter and cheese during the year 1858, from which it appeared that over $600,000 worth were sent to market from a single depot in Franklin county. In the *Middlebury Register* of Jan. 26, we find the proceedings of the annual meeting of the Addison Co. Ag. Society, from which it appears that premiums were awarded for the following crops:

Winter Wheat—34½ and 31½ bu. per acre.
Spring Wheat—35½ bu. per acre.
Indian Corn—123⅔ and 121½ bu. per acre.
Oats—71 and 65½ bu. per acre.
Peas—35 bu per acre.
White Beans—41¾ bu. per acre.
Potatoes—225 and 182½ bu. per *half acre*.
Sugar Beets—340 and 250 bu per half acre.

A YOUNG FOREST.—Our excellent friend, Major M. R. PATRICK, of Sacketts' Harbor, remarked a year or two since in allusion to the different departments of the government at Washington, that the time would come when there would have to be a Department on Woods and Forests. Sympathizing somewhat with this feeling, we always record with much pleasure any successful experiments in their increase and management, and have been particularly pleased with the premium awarded recently by the Illinois Agricultural Society for a grove of timber trees planted by L. H. Thomas, six miles east of Virden. The seeds of the trees were planted on new ground in 1852—3, and 4—and "many of the walnuts, oaks, and maples, are now twenty-five feet high, very thrifty, and growing."

HIGH FARMING AT THE WEST.—The Illinois State Agricultural Society, at the late meeting of its officers, awarded a first premium for a *forty acre farm*, occupied by two brothers, A. & O. Barnard of Bloomington, who, as the report states, "by pursuing a system of *deep plowing*, *high manuring*, and *clean culture*, for a number of years, *have distanced all competition*." We should like to have had the details of their management and profits, but the above is all we are favored with.

SUGAR CANE MILLS.—W. T. Dennis of Richmond, Ind., has obtained a patent for an improvement in the rollers of sugar cane mills. The rollers are plated with composition metal, to prevent the action of the acid upon the iron roller, which corrodes the iron, thereby discoloring the juice—making the sugar and syrup black, and injuring its flavor.

GOOD SHEEP.—Messrs. CHARLES & VAN METRE of the Center Market in this city, have recently bought 100 sheep of Mr. H. N. WRIGHT of Genesee county—50 of them were fed by S. Wilbur of Genesee Co., the average live weight of which was 135 lbs.—dressed, 80 lbs. The other 50 were fed by Wm. Ware of Batavia—average live weight, 109 lbs.—not yet killed. The price paid was 6 cts. per lb. live weight, making the first lot average $8.15, and the second, $6.54.

SHORT-HORNS AND DEVONS FOR CALIFORNIA.—Dr. JAS. C. COBB of San Jose, Santa Clara Co., Cal., having visited a number of different herds with a view to the selection of stock for shipment, finally concluded, last week, an advantageous purchase of Short-Horns from WM. HURST of this city, and of Devons from Capt. Jos. HILTON, New-Scotland. The former included "Duke of Elizabeth," 14 months old, and "Nymph's Marmion," 7 months, young bulls originally from the herd of B. & C. S. HAINES of New-Jersey, and two heifers, "Anne" and "Dutchess of Albany," the latter especially one of great promise, and both in calf by "Neptune." The four will be an important acquisition to the Durham blood of the Pacific coast, and will do much to render it as popular there, as it has long been at the east. We have not received particulars as we expected, in relation to the Devons obtained, but understand that they comprised several choice animals. The whole were to go in the steamer of Saturday. Accompanied by Col. JOHNSON, and Hon. JOHN WENTWORTH of Chicago, who has been spending some time in this vicinity, we paid a visit on Wednesday to the stock under Mr. HURST'S care. "Neptune," we are glad to say, has improved very much in appearance and condition since the State Fair, when he was not well, and is now in nearly as excellent order as ever before. Our readers already know that neither he nor his get, have often found their superiors. "Fenella," the red cow purchased at Mr. ALEXANDER'S last sale, by Mr. THORNE, and subsequently bought by her present owners, when passing through this city on the way to Thornedale, has a most likely heifer calf, now about six weeks old, sired in Kentucky by "Sirius," and, as far as one can judge at its present age, there is no fear that it will discredit its breeder or its parents. Mr. HURST deserves great credit for the good order preserved at his establishment, as well as for his skill in its direction, and we should be pleased to refer to both at greater length if our space permitted. Both Mr. H. and Capt. HILTON justly take some pride in the prospect that through the medium of the present transaction, Albany will come to be considered still more widely than heretofore, a center for the production and purchase of first-class animals.

SUGAR-MAKING FROM THE SORGHUM.—A Michigan subscriber says—"We want some good articles on sugar-making from Sorghum, defining the process minutely from beginning to end. The experience of last year should produce something new, and as it is attracting more of the attention of agriculturists than anything else, and will become a matter of national importance, all who experimented with it should furnish the public with the results."

"SHEEP AND WOOL."—Writing on this subject, the *Genesee Farmer* says, "One reason why farmers are averse to wool-growing, is the difficulty of making satisfactory sales, as buyers are always ready to decry the article when it first comes into market, and quite as willing to hold it for a rise after they have succeeded in getting it into their hands." This expresses the feeling of many farmers in regard to this business. The only remedy suggested, is to hint that "farmers who have good stocks of wool, can quite as well afford to hold it as those who often borrow money to purchase for that object."

ALDERNEY BEEF.—Mr. JOHN T. NORTON of Farmington, Ct., recently sold a pair of full-blood Alderney steers, three years old and not fat, simply in fair flesh, good store order. They were slaughtered, and, to the surprise of the butcher, made most superior beef, fully and elegantly marbled throughout. Mr. Norton obtained a cut for his own table, and assures the Homestead that it was "equal to any, if not the best beef he ever tasted. Better testimony cannot be had."

Our Next State Fair.—We give elsewhere a concise report of the proceedings at the Annual Meeting of our State Ag. Society, held in this city last week. It will be seen that in accordance with what we think was the generally prevailing sentiment, the meeting recommended Albany as the place of holding the next State Fair. The customary session of the new Executive Board was held on Friday morning, at which this recommendation was adopted, conditional only upon the compliance of the city with the usual requirements of the Board, and October 4—7 was appointed as the time. On the question of time there was quite a discussion, there being a strong feeling outside of the Executive Board, which we cannot ignore, in favor of an earlier day. We trust, however, that the weather may prove propitious, and that we shall not have occasion to regret the above decision from the cold rains or threatening skies then too likely to prevail, and the consequently diminished attendance. It is thought that under ordinarily favorable circumstances, there will be a sufficient interest taken in the next exhibition, not only in our own section of the State, but in westerly portions of New-England, to render the coming anniversary a marked era in the Society's history. During the years that have elapsed since the last Fair here, great changes for the better have taken place in this city and county, as well as through the whole territory around us—changes, which include not only improvement in various ways on the part of those directly interested in Agricultural and Horticultural matters, but also an increased attention to rural pursuits and pleasures by those engaged as a regular business in other occupations.

☞ We are indebted to Dr. R. T. Underhill of the Croton Point Vineyards, for samples of three kinds of Wine, which he has been manufacturing for some years past and which he now proposes to bring into market. One is made from the Catawba alone, another from the Isabella, and a third from a mixture of the juice of the two grapes. Dr. U. may be addressed either at Croton Point, or at Number 293 Broadway, New-York.

Vermont State Fair.—At a meeting of the Directors of the Vermont State Agricultural Society, held at Burlington on the 3d inst., it was voted to hold their next annual fair at Burlington, on the 13th, 14th 15th and 16th of September.

☞ The next Ohio State Fair is to be held at Zanesville, Sept. 20—23.

Grape Culture.—It will be seen by a notice in this paper, that D. M. Dewey, bookseller, Rochester, announces a new work on this subject. Such a work is needed, and if properly treated, will be a valuable addition to our rural books.

The Revolving Horse Rake.—Your correspondent John Jones is correct, in regard to Moses Pennock being the inventor of the "revolving" horse-rake—the *single* rake, however, had been in use several years previously. The records of the Patent Office will show that Moses Pennock took out the *first* patent ever issued on such rakes, and that on said patent he also took out the *first re-issue* patent ever granted under the U. S. Patent Laws. This is a memorable fact respecting the revolving rake. I cannot name with certainty the year in which this rake made its appearance—but it was *about* thirty-five years ago—as I remember well—when a boy at home on my father's farm—seeing friend Pennock bringing his rake to us for trial, and the gathering of the neighbors to witness its performance.

You may therefore safely place the name of Moses Pennock "in large letters" for the gratification of your correspondent "G. L." D. *Chester Co., Penn.*

Large Radish.—While writing, I will tell you what a large radish I took up out of my garden last October. It was two feet ten inches long—five inches above the bottom point, was twenty-one inches round, and five inches below the top, fifteen inches round. When topped and dirt cleaned off, it weighed twelve pounds. A. G. *Sabula, Iowa.*

Hint to Our Western Friends.—We very much need a large circulation of some well established and reliable work on agriculture, stock growing, &c., like the Country Gentleman, in Iowa. "By-the-way," Messrs. Editors, permit me to say that if you would solicit and urge through your columns, upon our western farmers, the great importance of communicating their views and experience through the same medium, I verily believe it would be much to your advantage, as well as enlighten some of your readers. D. A. *Farmington, Iowa.*

Fine Oxen.—One of my neighbors, Mr. L. Murdock, has a pair of grade Durham cattle, six years old past, matched when they were about 12 hours old, that now weigh about fifty-eight hundred pounds. He intends to feed them next year. If these cattle continue to do well, old Cayuga will be apt to take the front rank next year. H. A. *Venice Center.*

What of the Mice!—Two or three years since, complaints came up from all parts of the country, in consequence of the ravages of the meadow-mole. Fruit trees were ruined by thousands, and almost every thing having vegetable life was attacked by these vermin. This fall and winter they appear to be missing, at least in this neighborhood. Where have they gone to? We can say "good riddance" to them; but as we then bemoaned our losses, let us now give thanks that we are spared the like of them. E. Merritt. *Pawling.*

Kershaw Squash.—I enclose a few seeds of the Kershaw, raised by me last fall. Seed were sent to a friend two years ago, from Alabama. They keep about as well, or better perhaps, than the Marrow, and taste more like a *sweet* potato than squash, though the form resembles the Crook-neck, but it grows larger. I am very fond of eating slices of them, fried in pork fat. The Southerners eat them so, and also baked. Henry B. Osgood. *Whitinsville, Mass.*

Cholera in Hogs, &c.—The cholera is slaying its thousands, and the probability is that stock hogs will be high in the spring. Horses, mules, cattle, and sheep, are high now. F. R. *Bullitt Co., Ky.*

Black Barley.—I inclose a sample of Black Barley. This is a fall or winter variety, recently introduced from England—so says the gentleman who has just sent it to me from Hamilton Co., O. He says it is very prolific—having counted 56 heads from one grain; says it will not malt, but is raised for stock—being superior to oats. This barley may not be new to you. I shall give it a trial. L. Norris. *Windsor, O.*

Net Weight of Swine.—In one of the recent numbers of your paper, I notice a carefully prepared statement of the gross and net weight of hogs, showing in the cases quoted, that a deduction of one-fifth was quite too much. Being a western man, I would like to ask if our eastern friends are in the habit of sending such hogs to market as a rule? If so, then we must give up, for while I have seen many such hogs, yet it is not true as a rule. A drove of 300 or 400 hogs, making an average of 250 or 300 lbs., would be extra fine. I have been so situated for some months past, that I have made up the loss in netting hogs for several thousand head, and find that hogs of 200 to 300, well fatted, will lose the one-fifth, while if under that weight, and only marketable, the loss has been one-fourth. Extra hogs, such as stated by your correspondent, would not vary from his statement. Subscriber. *Alton, Ill.*

Cure for Scratches on Horses' Feet.—First wash them clean with soap and water—then apply white lead and linseed oil, rubbing it thoroughly in with a brush. One application will commonly effect a cure, but in bad cases two may be necessary. Wilson Dennis. *Applebachville, Pa.*

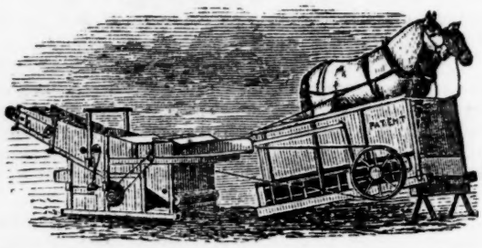
☞ The "Memoranda" of *fifteen hundred and fifty-one* interrogatories in agricultural statistics, issued by the U. S. Patent Office, have been sent us by Chas. Morrell, member for New-York of the late "Advisory Board."

FIRST PREMIUM HORSE POWERS, THRESHING MACHINES, &c.,

Made by G. WESTINGHOUSE & CO.,

SCHENECTADY, N. Y.

First Premiums at the State Fairs of New-York and Michigan in 1856, New-York and New-Jersey in 1857, and New-York in 1858.



Endless Chain Powers—One, Two, and Three Horse.

These are made to run still and easy, by having the chains peculiarly constructed; and all danger to the team by having the gearing fly off, when in motion, put away, by having it so fastened that it cannot work loose and come off when in motion.

The Three-Horse Powers are equal to a Six-Horse Lever Power, for driving a Threshing Machine. Threshers of suitable sizes are made to go with these Powers.

Lever Iron Powers, for from 4 to 8 horses.

From our experience in the manufacture of this class of machines, and the examination made of the various kinds now in use, we think we are justified in the opinion that we have a Power which is superior to most, if not all others now in use. We have its gearing placed in a strong cast-iron frame, all one piece—therefore will not rot, nor become weak by exposure to the weather, as with wood frames, which let the machinery get out of place, causing it to break or wear out, besides making the Power run heavy. Powers often lose 10 to 50 per cent. of their power, by becoming strained from their proper shape. The Jack is connected with the Power by a line shaft with universal joints. The horses have only to step over this shaft. The motion can be very readily changed from that necessary for threshing, to that for a Cotton Gin. The band-wheel is horizontal, which makes it convenient in threshing as the Power may be left unmoved, while the Thrasher can be changed to different positions. No arms or center are used or necessary for the main driving-wheel. The power is conveniently arranged for moving, and easily set for working, and we believe it will be found as efficient with six horses, as most others are with eight.

Overshot Threshers with Vibrating Separators, combined with a Winnower.

These Threshers have an arrangement patented by us, which effectually prevents the grain and dust from flying into the feeder's face—which removes the principal objection to Overshot Threshers. The cylinders are made strong and heavy, have their teeth or spikes securely fastened in by a screw and nut inside, and are perfectly balanced before leaving the shop, by being made to run perfectly still at a high speed, on a light frame.

The Vibrating Separator merely separates the grain and chaff from the straw, but is done in a perfect manner by aid of a straw-shaker placed in the Separator. We have obtained first premiums at a number of the New-York State Fairs, on our Thresher and Vibrating Separator, and are considered by all who used have them to be the best in use.

The Winnower combined with the Thresher, threshes and cleans the grain, delivering the clean grain at the side of the machine by a spout. A revolving wire separator connected with it, makes it the best machine for separating the grain from the straw, that there is now used. It threshes clean, cleans the grain well, and when doing a fair amount of work, will not waste grain by carrying it off with the straw.

We make two sizes of this machine. One size for a Two Horse Endless Chain or a Four-Horse Lever Power; the other for a Three-Horse Endless Chain or Six to Eight Horse Lever Power. We also make Undershot Threshers with Winnowers, which have been driven usually by Lever Powers.

We have purchased the right of making Pusey's Patent Governor for Endless Chain Horse Powers, in connection with ours. This will be found to be an excellent addition to the Power, as it effectually regulates its motion, and is a preventive of accidents liable to occur by the breaking or flying off of belts.

Besides the above, we make machines for Hulling Clover, with or without a Cleaner attached; Wood Saws, Drag and Circular. Also a Butter-Worker, invented by George Price, a Shaker, which is by the Shakers said to be an excellent machine for that purpose.

PRICES.

Two-Horse Power Thresher and Separator (26-inch Cylinder,)	$160
Two-Horse Power, Thresher and Separator, (30-inch Cylinder,)	165
One-Horse Power, Thresher and Separator,	135
Three-Horse Power,	140
Two-Horse Power,	115
One-Horse Power,	90
Lever Power without Sweeps,	110
Lever Power with Sweeps	115
Two-Horse Power Thresher and Winnower (55 feet of Belt,)	245
Thresher and Winnower (for Two Horse Power,)	125
Large Thresher & Winnower, with Tailing Elevator, for 3-horse Endless Chain or Lever Power,	145
Thresher and Separator (26-inch Cylinder,)	45
Thresher and Separator (30-inch Cylinder,)	50
Clover Machine with Cleaner,	80
Clover Machine without Cleaner,	40
Circular Wood Saw (24 inch Saw, Railway Table,)	40
Circular Wood-Saw (24-inch Saw, Slide Table,)	37
Drag-Saw, for cutting logs,	32
Dog Power, for churning,	15
Pusey's Patent Governor,	8
Pusey's Patent Governor in connection with Power,	5
Shaker Butter Worker,	$10 and 12

Main Belting (Rubber) for lever power, 16 to 20 cts. ₱ foot.

All the above machines we manufacture in a substantial and workmanlike manner, and warrant them to suit those purchasing after a fair trial, and after we or our agents shall have had opportunity to correct anything that may cause dissatisfaction, or they may be returned to us, and the pay given will be refunded. Further information will be given upon application to the subscribers.

All communications will be promptly attended to, and orders receive immediate attention.

Feb. 24—w&m1t G. WESTINGHOUSE & CO.

THE LODI MANUFACTURING CO.

Poudrette! Poudrette!!

Is offered for sale by the subscribers, wholesale and retail, in lots to suit purchasers. This article has been now in use for over 17 years, and is the most popular manure for corn and early vegetables, in market.

It is quick and powerful, and can be put in direct contact with the seed without injury. Price $1 50 per barrel, delivered on board of vessel, for any quantity over 6 barrels. $2 00 for a single barrel.

CERTIFICATES.

The undergigned have used the Poudrette of the Lodi Manufacturing Co., for the number of years, and upon the crops set opposite to their names, and can recommend it as a cheap, and most excellent fertilizer.

Charles Smith, Bloomfield, N. J.,	10 years,	corn.		
Cyrus Canfield, Caldwell,	" 10 "	"		
John Squires, Livingston,	" 10 do.	and	garden	truck.
A. J. Jacobus,	" 17 do.	"	"	
H. W. Harrison, Caldwell,	" 10 do.	"	"	
J. Simpson, Franklin,	" 8 do.	"	"	
Hiram Farnham, Livingston,	" 15 do.	"	"	
J. A. Harrison, Orange,	" 10 do.	"	"	
B. F. Lum, Chatham,	" 15 do.	"	"	

A pamphlet containing certificates of practical farmers in all parts of the United States, with every information and direction for use, will be mailed to any one sending the address. GRIFFING BROTHER & CO.,

General Agents for the Company,

NORTH RIVER AG. WAREHOUSE, 60 Cortlandt-st, N. York.

TO PLANTERS AND FARMERS.

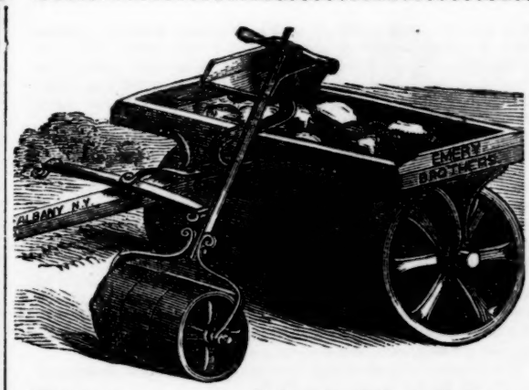
CORIA.

This fertilizer is composed of dead animals, leather scraps, old boots and shoes, (gathered in cities,) dissolved by a new and ingenious process, into a liquid of the consistency of molasses; to this is added night-soil, blood, and ground bones. The whole is then dried and ground.

It is offered for sale on the strength of the well-known fertilizing qualities entering into its composition. Circulars, with directions for use and analysis, will be forwarded on application to the subscribers—agents for the Lodi Manufacturing Co. GRIFFING BROTHER & CO.,

North River Agricultural Warehouse,

March 1—m3t No. 60 Cortlandt-st., New-York.



IRON FIELD ROLLERS.—The annexed engraving represents the latest improvements in the Field and Garden Rollers, as manufactured at the

ALBANY AGRICULTURAL WORKS,
BY
EMERY BROTHERS,
PROPRIETORS,
Nos. 62 & 64 State Street,
ALBANY, N. Y.

The Field Rollers are made of 12-inch iron sections of 30, 24, and 20 inches diameter, and four to seven sections all hung upon a heavy iron shaft, of the required length for the Roller.

Hangers from each end of the shaft, suspend a strong plank box or tray over the Roller, for carrying extra weight; to this box, a tongue is bolted for drawing the same.

By this construction, each section revolves independent from the others, which greatly facilitates turning it about, and avoids shoving up the ground in the operation.

The Roller serves to level and smooth plowed land, and when seeded to grass, prepares it for the Scythe, Mowing Machine and Horse-Rake, as it forces sods and small stones into the ground, pulverizes the lumps of earth, and compresses the soil at the surface around the seeds sown, and causes a quicker and more sure germination and growth. This compression deprives of shelter many kinds of injurious insects, which otherwise would find habitations among the lumps, stones, and loose earth—often to the detriment of the growing crops. When used on land after the frost is out in spring, it presses back the earth and roots of plants which have been raised by the action of freezing, and preserves the crop, which, if left exposed, would have been destroyed.

This compressed surface, although but nominal in thickness, is a sure preventive of the beating down by heavy rains, as it will withstand the force of the hardest storm of rain or hail, and cause the water to filter gently through, without drowning and solidifying the earth beneath.

In light and porous soils, the Roller is indispensable for the retention of sufficient moisture to protect vegetation, and often saves the whole crop from the effects of a burning sun without it.

Price, 30-inch, 6 sections, $50—$5 off for each section less than 6.

Price 24-inch, 6 sections, $45—$4.50 off for each section less than 6.

Price 20-inch, 5 sections, $35—$4 off for each section less than 5.

GARDEN ROLLERS (for Hand Use.)

These are constructed of iron sections, in a similar manner to the Field Rollers, but without box for extra weight. One sided weights are attached to the shaft inside of each section, and the handle is forked and fastened by square fittings to each side of the shaft, and is thus counterbalanced and inclines upward, and relieves the operators.

Prices, 15 inches diameter, 2 sections 7½ in. long, $6.50—each additional section extra, $1.50.

Price, 20 in. diameter, 1 section 12 in. long, $9—each additional section extra, $4.

Price, 20 inches diameter, 1 section, 20 in. long, $14.
Price, 24 inches diameter, 2 sections, 12 in. long, $18.
Price, 28 inches diameter, 2 sections 12 in. long, $20.

Full Descriptive and Illustrated Catalogue of the Albany Ag. Works, furnished on receipt of 6 cents to prepay postage on same. Feb. 17—w&m1t

HUNGARIAN GRASS.—The Subscriber is now prepared to furnish the public with GENUINE SEED, in small lots—price per bushel, $3 00. A sufficient quantity to seed one acre will be forwarded to any address upon the receipt of $1.00.
WILLIAM THORBURN, Seedsman,
Feb. 17—w3m1t 492 Broadway, Albany, N. Y.

EARLY SEEDS.—As the season of Hot-bed making is near at hand, the subscriber calls attention to his complete assortment of EARLY SEEDS, consisting of all the most desirable varieties of Cabbage, Lettuce, Radish, Cauliflower, Tomatoes, Cucumbers, Egg Plants, Carrots, Celery, Peppers, &c., required for early use. The seeds are all fresh, and of first quality. WILLIAM THORBURN, Seedsman,
Feb. 3—w3tm1t 492 Broadway, Albany, N. Y.

FIELD AND GARDEN SEEDS from reliable growers.
Agricultural and Horticultural Implements of the most approved patterns.
GRIFFING BROTHER & CO.,
Feb. 10—w&m3ms 60 Cortlandt-st., New-York City.

THORBURN'S DESCRIPTIVE RETAIL CATALOGUE of Garden, Field and Flower Seeds for 1859, now ready, will be mailed to applicants, by enclosing a one cent stamp Address
WILLIAM THORBURN,
Feb. 10—w3tm1t. 492 Broadway, Albany, N. Y.

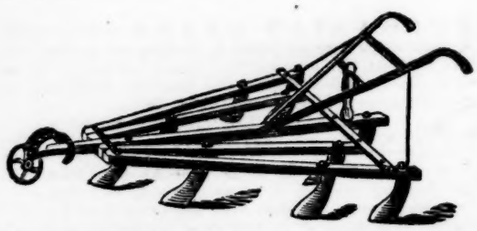
NO. 1 PERUVIAN GUANO,
"Hoyt's" Superphosphate of Lime,
Bone Dust, Plaster,
Poudrette, Tafeu, &c.

The above Fertilizers *warranted* pure, and sold at the lowest market price.
GRIFFING BROTHER & CO.,
Feb. 10—w&m3ms 60 Cortlandt-st., N. Y. City.

SPECIAL NOTICE.—FARMERS SEND your orders for
Shares' Patent Coulter Harrow and Grain Coverer,
Shares' Patent Potato Covering Machine,
Shares' Hoeing and Hilling, and Cultivating Machine.
These Implements, which attracted very great attention at the winter meeting of the N. Y. State Ag. Society, held at their rooms in this city, on the 10th inst., will work on any kind of land, even if stony and stumpy. Every farmer present expressed himself highly pleased with the principle and appearance of the machines, and we received a number of orders for them, from men *who had never seen them before. They were satisfied the principle on which they were constructed was right.* In the Co. Gent. of Feb. 10, we saw a communication signed by G. W. DURANT, giving his opinion of the Cultivating and Hilling Machine, which was the only one he used or ever saw. We will guarantee that each of these machines will perform as well, if not better than Mr. Durant says, and if farmers wish either of these implements, they must apply soon, as the demand for them is constantly increasing, and we are fearful that we will find it difficult to supply them in the spring. They will cause a great revolution in the working of the farm, making it *cheap and easy*, and more perfect than it was ever done before. *First come first served.* For particulars and Catalogue, address
PEASE & EGGLESTON, (only Manufact'rs.)
Feb. 17—w2tm1t Albany, N. Y.

TO DEVON BREEDERS.—To avoid breeding in-and-in, the subscriber offers to sell or exchange (for a strictly first-class animal,) his thorough-bred North Devon Bull "Metropolitan," now three years old, bred by R. H Van Rensselaer of Morris, Otsego Co., N. Y., directly from imported stock. Sire, Meguntic cook (251)—G. Sire, Prince Albert (102)—Dam, Ladybird (820,) by Venture—Grand Dam Lady, by Hundred Guinea (56.) JOHN BANKS,
Feb. 3—w4tm1t Bainbridge, Chenango Co., N. Y.

HAY PRESSES.—DEDERICK'S *Celebrated Patent Portable Hay Presses*, are acknowledged to be the only ones that will satisfy the demands of the Farmer. One ton of hay per hour can be pressed with one of these machines, worked by two men and a boy, in convenient sized bales, weighing from 270 to 325 pounds. Price from $130 to $165, delivered on cars or boat, in Albany, N Y. For further particulars, address
PEASE & EGGLESTON,
Feb. 10—w4tm1t Albany, N. Y.



SAYRE'S PATENT

(NOT SHARE'S PATENT,)

HORSE HOE,

AND ADJUSTABLE

DOUBLE MOULD-BOARD PLOW COMBINED,

MANUFACTURED AND FOR SALE BY

EMERY BROTHERS,

Nos. 62 & 64 State Street,

ALBANY, N. Y.

Also for sale by the Inventors and Patentees,

SAYRE & REMINGTON,

UTICA, N. Y.

This implement, although but recently patented and introduced, has had an extensive sale the past season.

It is equally well adapted for weeding, hoeing, and hilling corn, cotton, tobacco, broom oorn, potatoes, and in fact, all crops planted in hills or rows, and without the use of a plow or hand-hoe.

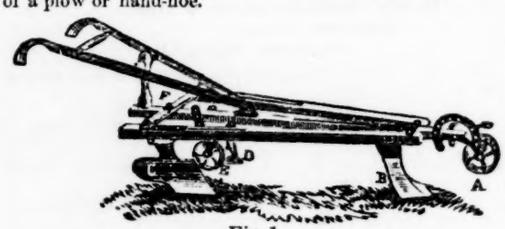


Fig. 1.

Fig. 1 shows the implement as arranged for hilling and hoeing. For common use, the wheel E is set as low as the edges of the blades or mold-boards C and D, which causes the implement to run level, the wheel traveling in the furrow made by the front tooth B. For wet soil, the wheel E should be lowered about two inches, preventing the blades C and D, running as low as the front tooth B.

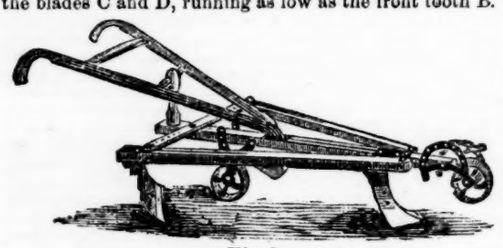


Fig. 2.

Fig. 2 shows the implement arranged for turning the earth from the crop—the change from fig. 1 being the transposition of the blades C and D, each for the other, thereby cutting up the weeds and covering them between the rows.

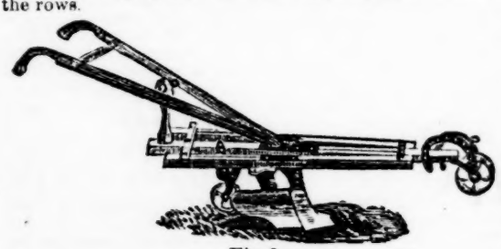


Fig 3.

Fig. 3 shows the same implement as arranged for a Double Mold-Board Plow. This is done by closing the sides of the frame, using a shorter cross-bar instead of the long one, as in fig. 1, and moving the forward tooth back, and the two back teeth, C and D, forward, so as to connect with the back edges of the forward tooth, which makes a complete Double Mold-Board Plow, with the wheels as shown in fig. 3, and is used for furrowing, ditching, ridging, hilling, and digging potatoes, as well as various other purposes.

The points and mold-boards are of the best steel, and highly polished. They are free from clogging in any soil, and very durable. By running on adjusting wheels at both ends, they are easily drawn, and can be set to any depth; and in being adjusted to various widths, they *do not change the working angle of the mold-boards C and D*, as is the case with all other expanding cultivators and horse-hoes.

Persons ordering them will please state what kind of soil and crops they desire to use them for, as among the great variety of forms and sizes of the steel mold boards, and temper of the steel, the best for each of the purposes for which they are to be used, can be selected.

They have been awarded Premiums as the best machines exhibited at the following Fairs:

United States Fair at Louisville, Ky.
" " " Richmond, Va.
New-York State Fair at Buffalo.
" " " Syracuse.
American Institute, at Crystal Palace, New-York.
Syracuse Mechanic's Fair, Syracuse.
Albany County Fair, Albany.
Oneida County Fair, Utica.
Herkimer County Fair, Little Falls.
Rensselaer County Fair, Lansingburgh.
Tompkins County Fair, Ithaca.
Saratoga County Fair, Mechanicsville.
Delaware County Fair, Delaware, O.
Maryland State Fair, Baltimore.
Virginia State Fair, Petersburg.
Seaboard Ag. Fair, Norfolk, Va.

The above includes every Fair where they have been exhibited.

They also manufacture and have constantly on hand, a great variety of kinds and sizes of Cultivator Teeth; also Cultivators complete for one and two horses, constantly on hand and for sale at the lowest remunerating prices. The two-horse Cultivator, as shown at the head of this article, is considered one of the best construction in use, as it is easily managed, and readily set to any width, and the teeth so arranged as to maintain parallel distances in working in the earth at all widths.

For prices, address by mail as above.

Illustrated Catalogues furnished gratis, on receipt of six cents to prepay postage on same.

AGRICULTURAL IMPLEMENTS
AT MANUFACTURER'S PRICES,

Consisting of Endless Chain Horse Powers and Threshers, Excelsior Fan Mills, Corn Shellers, Harrows, Straw and Hay Cutters, Cider Mills and Presses, Churns, Cultivators, Iron and Wood Beam Plows, &c., &c. Send for a Circular giving prices. For sale by A. LONGETT,
Mar 1—m3t | mar 24—w6t No. 34 Cliff-st., New-York

SUPERPHOSPHATE OF LIME.
BONE DUST Warrranted pure.
For sale by A. LONGETT,
Mar 1—m3t | mar 24—w10t 34 Cliff st, New-York.

In Press, soon to be Published,

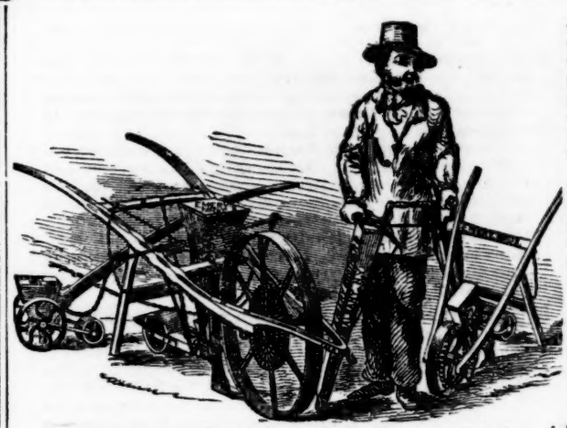
OPEN AIR GRAPE CULTURE,
Designed for the use of amateurs in the Northern States, with practical directions for the
Cultivation of Vineyards,

Comprising the observations and directions of the most eminent Grape Growers in the United States, and the latest and most approved methods of Manufacturing Wine, illustrated with numerous Engravings. By JOHN PHIN. Rochester, N. Y.: D. M. DEWEY. 1859.

Price in muslin binding,---------- $ 75
" " " with 4 colored plates,-- 1.50

The work will be forwarded by mail to any address, postage paid, on the receipt of the price, soon as issued—or on or before April 1. Address as above. Feb. 17w&m1t

CLOVER AND TIMOTHY SEED.—
The subscribers will, in connection with Agricultural, Horticultural, and their Garden Seed business, receive consignments (pay charges) of Clover and Timothy seed from growers and others. Dealing directly with the consumers of these articles, we can of course obtain the highest prices, and we respectfully solicit consignments of the above mentioned seeds. References as to responsibility given if required. PEASE & EGGLESTON,
Jan. 13—w8tm2t 84 State-st., Albany, N. Y.



SEED PLANTERS.—As the time for selecting and purchasing Planting Machines is at hand, the careful attention of farmers is called to the assortment manufactured and for sale at the

ALBANY AG'L WORKS,

Nos. 62 & 64 State Street,

ALBANY, N. Y.,

EMERY BROTHERS, Propriet'rs.

Among them may be found the two-handled

Albany Corn and Seed Planter,

Also known as Emery's Corn Planter—for hand or horse power, and adapted for all kinds of seeds, large or small, heavy or light, and any amount to the hill, drill, or acre. It is also equally well adapted for hills or drills. This is shown in the foreground in the engraved group of Planters annexed. Another is the two-handled

Garden Drill and Planter,

For all kinds of seeds, large and small, for garden use. This is shown on the right hand of the group in the engraving. A third is the one-handled

Seed Drill,

Intended only for small seeds and for drill planting. This is seen on the left of the group. The last of the group is seen in the hands of the Farmer, in the act of using it, and is called the

Double Hill Hand Corn Planter,

For planting two rows at a time by hand, in hills, as the operator walks through the field, as with two walking canes, one in each hand, and planting each time he sets them in the earth.

This assortment comprises all the Farmer and Gardener can desire, and each machine is of the most approved kind in use. The Albany Corn Planter has been in use nearly twelve years, and has been the most successful of all machines for the purpose intended—working equally well with all kinds of seeds and soils. It has gained a world-wide reputation, and enjoys a constantly increasing demand; and, notwithstanding the scores of more recent inventions, and many times the effort made to introduce them, this Albany Planter still maintains its supremacy.

It has the circular brush and slide distributing arrangement for small seeds, like the smaller Hand Garden Drills. It also has a wooden cylinder fitted inside the seed hopper, which is substituted for the circular brush, when corn and like seeds are to be planted. This cylinder has a series of cells or cups in its surface, which are adjustable to any amount or size of the seeds, or can be arranged so that only a portion of the cups shall receive seeds, while the others take none at all.

This cylinder receives a motion by means of its shaft and gear wheels, and connection with the large forward ground wheel. The disc of this large wheel having several rows of cogs, it can be made to give any variety of motion required to the cylinder, for planting various seeds, in different quantities and distances apart. With all the cells open, and the highest motion of the gears, it will drop once for every three or four inches, or equivalent to drill planting; while by shutting off a portion of the cells, and a slower motion, any desired distance may be obtained, to eight feet between the hills. It has a plow adjustable to any depth, and a coverer which scrapes the requisite amount of earth over the seed, and a compressing roller following, finishes the work at one operation. By lashing a wooden rod crosswise the frame, nearly over the plow, and attaching one end of a trace chain to it, at each side of the planter, and the width apart desired for the rows, the machine will mark off its rows as it works through the field, as while one chain drags in the mark last made, the other makes a new mark as it drags over the earth, thus planting exactly between the marks and always parallel. From six to ten acres per day can be planted with one man and a horse, with rows three and a-half feet apart. When used without a horse, not so much can be done.

Several other parties, here and elsewhere, have made patterns from this planter, and made and sold planters, representing them to be the same, none of which are so made as to do the work as well or uniformly, and few, if any of them, have been made so as to avoid breaking and grinding the seed, or retaining more or less in the cells, and dropping irregularly. Price $14.

The two-handled Garden Drill is calculated for small and light seeds, has the circular brush and sliding metalic plates, same as the simple drill, and as used in the Planter last described. It also has a wooden cylinder, with adjustable cells, for sowing large and heavy seeds like peas, beans, &c. This cylinder can be instantly substituted for the brush, and vice versa. This is only adapted for drills, although capable of operating with all kinds and quantities of seed. It covers the seed and rolls the ground at the same time. Price $6.

The one-handled Seed Drill is a light, simple machine, and adapted to drilling small and light seeds only. The axle passes through the lower portion of the hopper, and turns with the wheel. There is a circular brush fixed upon this axle inside the hopper, and revolves with it. There is a series of metalic slides to fit, and form the bottom of the hopper, each slide having holes of different diameters, through which the seed is forced by the action of the brush inside—the quantity of the seed depending upon the size of the hole in the slide, which is in the hopper. The drill makes its furrow, deposits with unerring accuracy the requisite amount of seed into it, and the roller follows and finishes the operation. Price $3.

The Double Hill Hand Planter is a modern invention, and consists of two complete planters, which may be used singly or connected together by their upper ends, and as shown in the hands of the farmer in the engraving. Each of them consists of a light wood box about as long as a walking cane, and will contain about three quarts of corn; and is provided with a D handle, by which they are carried and operated—the lower end is flat and sharp, and pointed with two flat spring steel plates, and enters the ground like a chisel. Inside the box is a slide-valve and a piston, both of which are moved by a side motion of the D handle, to which they are connected. It is operated by setting the point where the hill is to be, and pressing directly on the D handle, when the points enter to a proper depth, and with a slight sideways motion of the same handle, the seed is measured off, and forced into the ground by the piston to the bottom; thereby depositing the seed at an even depth, and as the point is withdrawn the earth closes over the seed. A man can operate two at once, as well as one, by setting the points at proper distance for width of rows, as he can plant as often as he will swing a scythe in mowing grass. Price, single, $3.50; double, $6.00.

Feb. 10—w&m1t.

VALUABLE MICHIGAN FARMS FOR SALE.—The late Dr. B. Ticknor's farm—320 acres—3 miles south-east of Ann-Arbor—the *model farm* in Washtenaw county, with buildings, orchard, soil, timber, water, fences and every thing to suit a farmer of taste and means—is for sale to settle the estate.

The "Bishops farm", 1300 acres, 15 miles north, and the "Place farm," 480 acres, 9 miles north-west of Ann Arbor—both good soil, well watered, well situated, and adapted to grain or grazing—will be divided to suit purchasers, and sold *very low*.

Titles good and terms of payment favorable.

Persons wishing residences in, or farms near this city, can, by calling on me, select from a very extensive list of Real Estate for sale.

E. W. MORGAN,
Jan. 6—w1tm2t* Ann Arbor, Mich.

THOROUGHBRED NORTH DEVONS FOR SALE.—Beauty 6th (527 Davy's Devon Herd Book)—9 years old.

Venus (1104 Davy's Devon Herd Book)—9 years old.

Annette (in forthcoming volume)—2½ years old. Sire imported Exeter (198)—dam imported Virginia (1116.)

Victorine (in forthcoming vol. of Herd Book)—yearling. Dam Venus (1104)—Sire Hiawatha—Grandsire Imported Comet. All herd-book pedigrees. Three first are served by my imported bull "Duke of Devonshire," bred by Jno. Quartly, Esq. Price for four head $550.

ALFRED M. TREDWELL,
Jan. 6—wt2m2t No. 251 Pearl-st., New-York City.

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